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A Ramble through South-Western France.

PERHAPS the most noticeable difference between the extreme south of France and the centre or north is that a larger number of old public buildings and churches remain in an unrestored state than might be expected at the beginning of the twentieth century. The borders of the Mediterranean are still comparatively pastoral and agricultural; whilst the northern districts, crowded with industries and a manufacturing population, are in every sense changed. In the north and centre of France the ancient churches, buildings which must always represent a desire on the part of a people to perpetuate its own memory in monumental form for future ages, have evidently disappeared to a remarkable extent. In purely rural districts the old parish church still lingers in the centre of each village. As a rule it is a perfectly uninteresting building, its outside walls probably "restored" during the past half century by the government department charged with this business, its interior "decorated" in the coarse and vulgar style of imitated mediævalism for which the school of Viollet-le-Duc is perhaps responsible, and every trace of ancient furniture and decoration completely removed, and replaced with the cheap gaudy trappings associated with the Roman Catholic religion on the Continent.

France has suffered from two very thorough destructions of ancient art and architecture. At the Renaissance and during the period of the religious wars the old churches were probably to a very great extent gutted of all that they possessed of mediæval furniture. But this havoc was more than completed by the atrocities of the various revolutions the country has suffered from during the past hundred years, which have always been animated by the curious desire to destroy everything ancient, or which could suggest a historical past. As a consequence, a strange sense of the unaccountable comes over one on finding as exceptions to a rule a few old tombs and monuments of various ages in out of the way corners of some of these old churches, when everything else has been sacrificed to revolutionary rage. These old monuments are usually of very little interest in themselves—naturally all that bore an important historical character had the least chance of surviving—they merely serve to accentuate the bareness of the old whitewashed interiors, and remind one of what an enormous amount of monumental art has been destroyed. The Government engineers found but little to "restore" during the "Gothic revival" of the past century except the bare walls and vaults of these old churches; all the tombs and altars and other ecclesiastical works of art of the former centuries had practically disappeared, and probably more than half the ecclesiastical buildings of France were in ruins, or being pulled down for other purposes during the early years of the nineteenth century. In the far south of France the natural indolence of the people, perhaps, tended to preserve the old buildings, and they have merely been converted as they stand into stores and workshops. In Avignon, for example, although the horrors of the Great Revolution broke out here with extraordinary violence, the city at first sight appears to be still provided with its ancient public buildings; but the defaced churches, with their broken statues and ornaments, are mostly converted to secular purposes. The curious palace-fortress of the mediæval Popes remains in a singular state of preservation—indeed, it is quite one of the best preserved unrestored buildings in the whole of France. Its simple massive walls, perhaps always devoid of armorial or decorative features, appear not to have excited the animosity of the revolutionists, who merely converted the place into a huge prison for the unfortunate "aristocrats" of the district. Since those days of horror it has served as the local barracks, for which purpose it is likely to remain in use for many years to come. Lately a project has been started to turn it into a provincial museum, but the means are not forthcoming. Two little frescoed chapels in one of the towers, supposed to have been painted by the Florentine Simone Memmi, remain in a wonderful state of preservation, the whitewash having been cleared off without any restoration of the old paintings.

Almost adjoining the palace is the curious little cathedral, a building of Romanesque period, with singular additions of much later times, well preserved and quite unrestored; and in this church are the monuments of two mediæval Popes, that of Benet XIII., still standing in its chantry, and in a remarkably perfect condition, but no doubt considerably patched up during the past century. The other monument, that of John XXII., is merely in fragments, and its original location is not clear; at least, the chantry in which it once stood no longer exists. This latter monument, to judge from the fragments which remain, was most extraordinarily like an ordinary canopied tomb of the English fifteenth century style, with a canopy of three divisions terminating in spires carried over a recumbent figure of the Pope. Traces of very charming coloured decorations of the Italian Cinquecento remain over the western entrance of this church.

Avignon is certainly the loveliest of all the old French cities; it is situated in the most beautiful part of the Republic, and its artistic remains are amongst the most interesting to be found in France. The view from the upper part of the city over the windings of the Rhone towards Villeneuve-les-Avignon is quite unparalleled in its peculiar character and charm, and it has the remarkable interest of looking almost untouched since the Middle Ages. The great château of Villeneuve, with its frowning battlements and round towers, and the mediæval town clustering round it, is seen at such a distance, that any trace of modern building which may exist is invisible. The ruined bridge with its tiny chapel on a pier, so well known from pictures, which once connected Villeneuve and the city of the Popes, gives almost an unreal effect to the exquisite landscape. No sign of modern life appears, no railway or factory chimney comes within view to mar the peculiar beauty of the scene. Even the modern bridge which

replaces the famous old one happens to have been constructed out of sight.

But, alas! this exquisite old city of so many historical memories is to be devoted ere long to a considerable amount of "progressive" vandalism. It would seem that the ancient walls of the city which still survive in a remarkable manner are to be removed. The *Journal des Débats*, &c, in a recent number draws attention to the threatened destruction in the following words:—"Le Ministre et la Commission des Monuments Historiques ont montré une scandaleuse faiblesse en abandonnant aux caprices de la municipalité un monument, dont du reste ils n'ont pas le droit de disposer."

Should this beautiful old palace-fortress of the mediæval Popes ever be "restored," some of the grandest and largest Gothic vaulted halls in existence will come to light. The great hall of the Consistory, now divided in its height by a wooden floor, is a splendid apartment divided by a row of columns into two aisles of immense length and width, but in its present condition its proportions are quite invisible. Its vaultings are still decorated with paintings of the early Italian school.

Carcassone is a very interesting place for the antiquary to visit. The old city, standing on a height and containing 600 inhabitants, is separated from the comparatively modern town and railway station by a river spanned by a mediæval bridge. Seen from the railway, the old city has almost a theatrical effect, reminding one of some reproduction of "Old Paris," or "old" anywhere else, at an international exhibition; and this impression is not very much lessened by a nearer approach to the ancient site. The walls of various dates surrounding the city, with the château at one corner, remain, at least as far as their plan is concerned, in a remarkable state of preservation. These ancient walls have for some years back been declared a national monument illustrating the mediæval history of France; but the very thorough "restoration" to which all their upper parts have been subjected must rather detract from their actual historical value. As a monumental picture of a mediæval city, due to the munificence of the French Government, Carcassone is a very remarkable place and well worth a visit.

The fortifications of Carcassone are of the crossbow period, and consist of a main curtain with towers of various form crowned by slated roofs (these latter are probably all modern). The base of this curtain is protected by another lower wall, with low round bastions in front of each of the towers of the main curtain. The château of the fifteenth century is an irregular enclosure surrounded by a higher curtain and round towers. It is a system of fortification without a moat, which the site on a hilltop and a southern climate necessitated. Within the tower there are very few ancient houses remaining, and only one church—the former cathedral, a building with a highly picturesque interior on a plan of the usual mediæval Italian type, the hammer-headed or tan cross. The poor commonplace cottage buildings of the town are probably much the same as must have existed in the Middle Ages, and consequently they do not detract from the unity of effect which has been aimed at in the modern restoration. Seen from a distance no modern buildings appear above the city wall.

This singular effort to "restore" a mediæval town is, of course, due to the influence of Viollet-le-Duc and his school. As a monumental illustration of the famous "Dictionnaire," it is of special interest to a student of mediæval antiquities, and the French Government is to be lauded for such a munificent gift to the artistic world as is constituted by this most learned restoration. For it is a distinctly learned, careful, and reverent restoration, and the buildings which form the monument remain unoccupied for any modern use, and so there is a certain interest attaching to the work, although to many visitors that special charm of an unrestored mediæval town, with its evidences of gradual change and development into comparatively modern usage, may be absent.

The least satisfactory detail in the restoration is the very much renewed church. This might surely have been left in such condition as the revolutionists may have determined at the end of the eighteenth century. But the building has been very completely "restored," and even a number of ecclesiastical tombs provided, with the deplorable reproductions of mediæval sculpture which the modern Frenchman considers good enough for a church. As a building this church has a remarkably picturesque interior; the transepts have an eastern aisle provided with shallow chapels, but the furniture is merely the ordinary modern Roman Catholic sort. A pompous inscription records the completion of this work in 1898.

The lower town of Carcassone also appears to be of mediæval foundation, but it has at one time been surrounded by an ordinary earthwork with bastions of the seventeenth century type. Hardly any mediæval buildings remain in this lower town, except two very large churches, probably built by the two great Orders of the Middle Ages. Both these churches are of the same Italian plan with three eastern apses within the width of a very spacious nave, and a great tower at the west end. As is the case with most French churches, the interiors are completely devoid of furniture and monuments older than the beginning of the present century, and such fragments of antiquity as may have escaped the Revolution have been removed by would-be "restorers," who have decorated the unfortunate buildings with poor imitations of Viollet-le-Duc's peculiar mural decorations.

The enormous span of the nave vaults in some of these southern French churches astonishes the northern visitor. These two churches at Carcassone are good examples of the ordinary style (fifteenth century). Many of the comparatively small towns or villages also possess churches of the same type, with naves of over 50 ft. in width. The means of supporting the thrust of these enormous vaults is obtained by building the walls as a series of small chapels on each side of the nave; the side walls of the chapels constitute enormous buttresses capable of carrying almost anything.

Albi is a wonderful old southern city, hard to arrive at and still more difficult to leave conveniently; it lies off the main railway lines, and retains that delightful air of the old "cathedral city" with which we are familiar in England. Its stupendous cathedral is its only monument of importance. A picturesque little palace of the archbishop stands in an adjoining enclosure and, combining with the mediæval surroundings, forms a charming picture of provincial France.

The cathedral of Albi is probably the largest example of the wide single-span vaults peculiar to the south of France. This stupendous construction is supported in the usual way on a series of enormous internal buttresses which form side chapels on each side of the nave. The choir of the church is formed by an enclosing wall of the most elaborate flamboyant stone tracery which entirely surrounds it, allowing of a passage or ambulatory between the choir and the external walls of the church. The interior seems to have been somewhat spared at the Revolution, and the fine large figures of saints, which very much resemble the series in Henry VII.'s chapel, Westminster, still occupy nearly all the niches. Two features about this church are of special interest to a student—its particularly imposing and beautiful proportions, due chiefly to its simplicity of plan and completeness in every respect, and secondly to its very original decorations. These decorations consist of elaborate painting over the entire internal surface of the building in the early Renaissance style, and with the utmost variety of colour and detail. Each division of the great vault is treated differently, and, of course, the small lateral chapels have each a separate design. These decorations, which must have become very decayed at the beginning of the nineteenth century, were restored at that time by local workmen, who painted them over in oil colour, following the original design with few exceptions. The total effect is rich and very interesting.

Marseilles is a grimy, squalid, deplorable-looking city, with hardly a redeeming feature from the architect's point of view. Its modern quarters resemble Paris in their vulgar pretentious architecture of a style which, after a few years of exposure to a smoke-laden asmosphere, assumes a particularly depressing and gloomy effect. The huge masses of ponderous stone carving framing the innumerable windows of a modern French boulevard or street are peculiarly meaningless and uninteresting. The monotonous character, the vulgar display, the want of individuality, and also the want of scale in these buildings, produce as depressing an effect on the mind as some suburban district of London. In the case of Marseilles the unsatisfactory characteristics of the city are heightened by a detestable climate and the consequences of a dirty smoke-laden atmosphere. More even than in Paris the sordid commercial spirit of modern days is manifested by the universal method of constructing the houses with their pretentious carved stone fronts apparently reposing on the plate-glass windows of cafés and shops. Hardly a house in Marseilles possesses a ground-floor which is not a shop. In fact, Marseilles, though it is considered the second place in importance in France, is a very second-rate city. It is as squalid as Naples used to be, but without the beautiful atmosphere of Italy to redeem its ugliness. Its unswept streets, encumbered with the eternal French café chairs and tables and the obtrusive display of low-class stores, give a detestable impression to the visitor anxious to get away from such a disagreeable sort of place.

As in the case of all French cities of modern days, the architecture of the public buildings, as well as the new houses in the

boulevards, has evidently been "made in Paris." Architecture of such a kind is not sufficiently interesting to call for criticism; every local characteristic is eliminated, and the huge *maisons de rapport* may be better studied in their native Paris, where their peculiar developments are carried out on a more impressive scale.

The only noticeable modern monument of any artistic importance in Marseilles is the Cathedral, a huge building at the side of the port, chiefly built during the reign of Napoleon III., whose name is inscribed within it under the title of "Præses Reipublicæ." It is imposing on account of its size and singular position, almost overhanging the great port and quite detached from the city. It is in that peculiarly uninteresting round arched style so much affected by the modern French church; its details have the appearance of being machine work, and its decorations are painfully unconventional. Completed so lately as 1886, this building looks quite old in consequence of the blackening effect produced by the neighbouring port. It has all the uninteresting character of a great monument completed and finished in every part "by contract." Nothing suggests any private or individual interest in any part of the building. No monuments or private chapels disturb the uniformity of this model Government cathedral. It has been built by Government architects at Government expense; and it remains a gloomy, unsympathetic monument of the State religion of the country.

ON SOME UNFINISHED PICTURES.

"INTERNATIONAL" is a rather large term to apply to an exhibition in which a few foreign artists—mostly not of the highest rank—exhibit along with a number of English ones, many of whom also are not very much known to fame. "International Society of Sculptors, Painters, and Gravers" it is called ("engravers" is evidently a vulgar word); but the internationality seems to be rather in abeyance, for even some of the few foreign works are apparently lent by owners, and not sent directly by the artists. Moreover, this International Society apparently cannot spell the name of the greatest French landscape-painter, for two small landscapes lent by Mr. J. S. Forbes, which seem to be early works by M. Harpignies, appear as by "Harpigny." At all events "Beaulieu" (112) shows exactly M. Harpignies' peculiar method of outlining the stems of trees with a streak of dark colour, and it is odd if there is a painter with a name so similar employing so similar a method.

Nevertheless, the exhibition at the Piccadilly Galleries is of interest, not only because it contains a good many clever and striking pictures, but because it serves to illustrate a certain tendency in modern painting—landscape-painting especially—to regard the subject of the picture not as a matter of interest in itself, but merely as an opportunity for showing the handling of an effect of light, or of mist, or of colour, which is regarded as the end in itself, the development of the nominal subject of the picture being a secondary matter. In some cases this is carried to a perfectly absurd extreme, as in Mr. Studd's "Hampton Court" (27) the object of which is evidently the contrast of colour and line between the masses of trees and the building, but in which the trees are mere formless blotches of pigment, which it is ridiculous to ask us to accept as trees; and there are other examples just as bad. Works of this kind may be very useful to the artist as rapid memoranda of effects made on the spot; but to exhibit them as works of art is playing on the credulity of the spectator. So, again, M. Neven-du-Mont's "Lily—a Portrait" (63), is a good rapid pastel study for a portrait, but much more a work for the studio than for the picture gallery.

There are other things in the exhibition which, as examples of a broad and free treatment of Nature without finish of detail, are of considerable power and interest, and serve to remind one of Muller's remark to Constable as to the finishing of a picture being the spoiling of it. Mr. Priestman's "The Lock" for instance (77), is a fine study of effect of trees and water, and one might very well accept the idea that to carry it further might be to spoil it. But then, in this and other cases, is not the artist really shirking a difficulty, either in regard to executive power or to labour? It is surely a much easier task to produce a broad effect which shall please the eye and mind, and suggest a good deal more than is actually made out, than to carry the picture out to a more complete stage without losing the appearance of breadth and freedom. That is just wherein the highest difficulty lies, and the artist eludes it. The curious feature in connexion with the whole matter is that these painters of unfinished pictures would persuade the public, and have persuaded some of the coterie of art critics, that there is an æsthetic superiority implied in the mere fact of leaving a picture at this stage; that this is the higher art; that an unfinished picture stands *ipso facto* on a higher level than a finished one. It is only on this supposition that one can explain a great deal of really clever work which is to be seen in such an exhibition as this. There is even in the catalogue a long quotation of mystical satire from Mr. Whistler in regard to the abject folly of finishing portraits or figure paintings (for that is what it seems to amount to), dramatically illustrated by his own ghost of a figure of Phryne. Whether the artist himself really believes in such a painting of the nude figure as this, or whether he is merely amusing himself by playing on the credulity of his public, is a conundrum we do not undertake to solve.

Taking this, however, as a collection of for the most part unfinished pictures, there are in it a good many works of power and interest as such; among the landscape studies especially. Mr. Paterson's "Blacknest Tarn" (2) is a good study of the landscape under the light of the rising moon; the moon is cracked on the face and not quite spherical, though evidently meant for a full moon, but the effect of light is there. Mr. Reid-Murray's sketch of "Autumn Landscape" (65) has merit of the same kind—a mere sketch, but true in light and colour; Mr. Priestman's "Uplands" (89) also; his "Bend of the River" (87), on the other hand, is a mere smudge. Landscape composition (if there is still such a thing) is well illustrated in Mr. Grosvenor Thomas's "Evening" (103). There is poetic feeling in Mr. Withers's sketch of "Evening on the Forth" (119); character and interest in Mr. Dekkert's "Low Tide at St. Monan's" (120), with the craft aground in the wind; and Herr Petersen's "Marine" shows a certain individuality in colour and general treatment of the sea, without outstepping the limits of Nature; as much cannot be said of his "Hochsee" (254), which is a mere stage sea under artificial lighting. James Maris's "Amsterdam" (107), lent by Mr. Forbes, is a really fine work, but is only a loan, not an artist's exhibit. Pissarro's "Le Carrousel" on a winter morning (242) is a real piece of Paris winter effect; and there is another admirable winter picture in Herr Buysse's "Wondelgen Church" (273), seen at the end of an avenue with snow on the ground; a kind of modern Hobbema as to composition. An interesting and suggestive picture too is M. de Sidaner's "La Statue" (238), a little *place* in some French country town, seen in warm mellow sunshine, the "statue" in the middle forming a central object with its back to the spectator, so that we may fancy it what we will. Some of the contributors, however, seem to have a special spite against architectural subjects; one of them shows a front of Amiens Cathedral (209) in what is called "water-colour," but may be rather called a scrabble in dirt, and the same may be said of "Vieilles maisons au bord de l'eau" (28), by another foreign contributor—a smudge out of which it is indeed difficult to make anything.

Such a sketch as Mr. Crawhall's "Barnet Fair" (23), a momentary effect, as one may say, of sunlight and horses, forms one of the best apologies for the system of unfinished pictures, representing as it does an effect which was worth record but hardly perhaps worth a picture in the completer sense. So also Mr. David Gauld's "Ayrshire Calves" (55: is there a particular character, by the way, in Ayrshire calves as distinguished from others?) shows an excellent study of animal form and movement, though the texture is left to the imagination. Among figure subjects which come within the prevalent temper and tendency of the exhibition Mr. Chase's life-size of a woman and child, "His First Portrait" (21), cannot however be classed among unfinished pictures; it is painted in a broad style and somewhat dingy in colour, but is a complete and expressive work. Mr. Lavery's beautiful half-length portrait of a lady (48) is complete in every sense, and a picture which seems quite out of place amid its surroundings; in two other works he seems to have relapsed into the prevalent habit of the place and sent large scale portraits which are in a very crude stage of execution. M. Renoir's picture called "The Promenade" (93) is a curious example of the tendency referred to above, to regard a subject not for itself but only as a means of exhibiting the study of a particular effect. The figures are a man and woman representing the most uninteresting and vulgar type of French middle-class life; as far as they are concerned the picture is absolutely ugly and commonplace; but it is painted, and hung, for the sake of the representation of the effect of broken sunlight, through foliage, on the woman's white dress. This is cleverly done, but was it worth while to paint a picture of this kind for the mere sake of the effect? One is curious to know, too, for reasons of another kind, what a life-

size portrait by Boldini is doing here; a kind of picture and a kind of artist that we should have thought would have been repudiated with both hands by the Committee of an exhibition of the professed aims of this one; a picture which represents the most commonplace *chic* of sleight-of-hand painting. The exhibition can boast of a fine picture by Israels (101); but that is a loan, and not an artist's exhibit

The works in sculpture are only small bronzes for the most part—not numerous nor very important; but M. Troubetzkoy's small group called "Mother and Child" is full of force and character, and we may also draw attention to Mr. Fisher's fine bit of enamel design on copper, "How Beautiful upon the Mountains," &c., classed in the catalogue with the West Gallery exhibits, but really in the Central Gallery. This at any rate is finished, and is a beautiful bit of work of its kind. And among the unfinished pictures there is much to admire, in others besides those we have named. It would be interesting to have an exhibition of them in their finished stage next year.

NOTES.

The late Mr. Brooks.

Mr. James Brooks, whose death is recorded in our obituary column, together with a list of some of his executed works, filled a more important place in modern English architecture than the general public seem quite to recognise, judging from the meagre notices of him which have appeared in the daily papers. Commencing his architectural career at the time when the movement for church building was in full activity, and being employed largely as a church architect, instead of following the line of mere imitation mediæval architecture, he struck out a path of his own, and exactly in a direction in which a new ideal for the modern church was very much needed. He was professedly and by predilection a Gothic church architect; but he treated Gothic in a manner of his own. He perceived that the principle of mediæval architecture could be as well illustrated in brick as in stone, and that it was possible to carry out large churches for the masses at a reasonable cost, not by being content with thin walls and bad carving, but by employing plain materials in a substantial and monumental construction, and depending for effect on composition and mass rather than on ornament. On these lines he succeeded in producing churches, for town sites especially, which were dignified and solid edifices with no suspicion of modern-mediæval gimcrack about them. He obviously gave a great deal of study to the designing of the lines of his buttresses and gables and other features which are sometimes treated in a perfunctory manner; and the evidence of the study was unmistakable in his buildings. Plain as they often were, they were never commonplace, and gave the impression that every line had been carefully considered. His design for Liverpool Cathedral, based on a fine plan, and with a great deal of power and picturesqueness in the architectural treatment, was a remarkable conception, over which also he spent immense care and thought, studying and drawing many parts of it to a larger scale than required in the competition drawings, in order to work it out more thoroughly. He was an architect possessed both of genius and of the faculty of painstaking and conscientious study.

The Glasgow Visit of the R.I.B.A.

The meeting in Glasgow last week of the Royal Institute of British Architects left nothing to be desired except, perhaps, better weather. Although some well known architects were absent, the meeting was representative both of the profession and the Institute, and the heartiness of the welcome of the Institute by the local architects says much for the good understanding existing between the allied societies and the parent body. On the occasion of such a successful exhibition as that which is now being held in Glasgow, the visit was sure to be specially interesting and profitable, but success was assured when the Corporation and the Glasgow Institute were united in the endeavour to give the visitors a hearty welcome. A fitting conclusion of the visit was the brilliant reception by the Corporation in the municipal buildings, when the members had an excellent opportunity of inspecting Mr. Young's building. Altogether, the visit must rank as the most successful of the kind which the Institute has held away from London.

The Liverpool Cathedral Scheme.

A Liverpool architect, Mr. Shallcross, writes an admirable letter in the *Times* attacking the action of the Liverpool Cathedral Committee in regard to what, as he truly says, is a matter of national and not of merely local interest. He directs his criticism especially against the mistake on which we have already commented, of demanding a cathedral "in the Gothic style"; a double mistake, since not only is the idea of demanding a style of the past an absurdity in itself, but the mediæval type of cathedral is not suited either to the requirements or the sentiment of modern worship. In fact, the Cathedral Committee appears to consist of fossil ecclesiologists who are totally unaware of all that has been going on in the modern architectural mind during the last quarter of a century. They make no undertaking, either, to employ professional advice or assistance in judging of the drawings sent in to them. They may be pretty well assured that no architect of the highest class will respond to such an invitation.

The National Trust.

The society which is now becoming well known as "The National Trust"—for places of beauty; &c., being understood (we may suggest, *en passant*, that the society, whose offices are at 1, Great College-street, Westminster, should adopt the popular name if only to propitiate journalists)—highly congratulates itself on the excellent piece of work it has done by obtaining for the public in perpetuity a large tract of land on Derwentwater. No one can move about the United Kingdom without seeing what a wide and useful field there is for the operations of this society. We look forward to work being done by it no less valuable and national than that of the Commons Preservation Society. There are many open spaces and many interesting buildings which will be lost to future generations unless they are taken charge of by this society. Perhaps the most striking example is the Thames, which every year is losing something of its charm by the erection of houses along its banks—the goose being rapidly killed for the sake of the golden egg, since every villa that is built by the side of the river takes away from its beauty. Unquestionably the time has come when this society would be undertaking a national work if it set out to obtain for open space as much land as it can obtain along the banks of the Thames. We believe that were a special fund opened for the purpose it would be widely supported, and there is so much land in the market on the Thames that there would be no difficulty in commencing operations at once. On the architect and the architectural student this society certainly has great claims, since it is likely to hold for posterity many important buildings which, not being as world-famous as English cathedrals, are liable to be lost unless placed in the hands of a society whose object is primarily not to restore but to preserve.

Labour Disputes.

A letter published in the *Times* this week from Mr. Thomas Case, the well-known Oxford tutor, called attention to various interesting points in regard to labour disputes. Mr. Case appears to think that the right of combination has given too great power to working men, but it is now purely academic to complain of this fact, for combination is the most remarkable feature of recent trade movement among all classes. Trusts and co-operative societies are striking examples. When, however, Mr. Case says that workmen "have a legal right, which is less defensible (than the right to combine), to combine to picket in crowds, with a view to information about another's business," he undoubtedly points to a weak spot in the present state of the law. Theoretically, it may be perfectly harmless for several hundred workmen to surround a factory, and inform non-union men of the mistake it is to go on working in that building. Practically this amiable and benevolent object becomes a severe threat, and where one man is getting information a dozen are using threats. And as long as the law stands as it does this must happen, for it is powerless to prevent verbal and also indirect intimidation by the mere presence of masses of hostile men. Workmen should have the fullest right to strike and to combine, but the moment a strike is declared it should be made illegal for workmen on strike to loiter near a building owned by capitalists against whom the strike is directed. Absolute freedom for every one should be the aim of the law, and any form of picketing is a blow at individual freedom.

The Workmen's Compensation Act.

The decisions of county-court judges are, of course, not binding as legal precedents, but, from time to time, they deserve consideration, as in the case of that recently-given at Southwark. The long and short of the case was that the hands of a workman, by continued working at a particular process, became sore and then diseased, and it was contended that he had suffered from "a personal injury by accident." It is clear that the workman was not injured by what is popularly and generally known as an accident, and the Judge so held. But obviously the case raises questions of some importance, since it

is—as happened to this workman—quite conceivable that a man may be injured just as seriously gradually as suddenly. In such circumstances why is he not to be compensated? It may be said that he enters into the work knowing what risks he runs. But in a sense every workman knows that in most trades he is liable to accidents. One can imagine a painter, for example, being seriously injured in his health. These cases are rare, but that is no reason why they should be left outside the Act, and it would appear desirable that, in cases of injury to health by the use of certain processes, the workman should be entitled to compensation when a real chain of causation between the sickness and the process can be clearly proved.

Architectural Association of Ireland.

The Annual Report of the Architectural Association of Ireland, together with the prospectus of meetings and classes for the coming session, shows that the Association is in earnest in its endeavour to promote and facilitate architectural study. The Association has still to make its way, and we presume it has not received as yet all the support it may have the right to hope for, but the tone of the Report is encouraging. The Association is offering a studentship of 10*l.* (open to members under thirty) for the best measured drawing of a building in Ireland erected before 1820; a good list of suggested buildings being added. The Institute of Architects of Ireland offers a prize of the same amount to members of the Architectural Association for a design for Public Baths and Wash-houses for a town in Ireland with a population of 20,000; Mr. Doolin offers a prize of four guineas for the best-filled sketch-book; and Mr. W. F. Beckett one of two guineas for the best sketch of the Custom House, Dublin. Classes for architectural history, design, and building construction are to be held twice a week during the session. "Every effort is being put forward to make these classes of real and lasting benefit to the students." Their success must largely depend on the students themselves, and it is to be hoped that they will do their best to take advantage of the opportunities of improvement offered to them.

A.A. Discussion Section.

The programme of subjects to be considered in the Discussion Section of the Architectural Association during the coming session is a very good one, and appeals to a variety of interests. It includes, among other subjects, "Stables and Stable Fittings," the subject to be started by Mr. H. Gregory Collins; "Design in Furniture," by Mr. Vivian H. King; "The Manufacture, Testing, and Uses of Portland Cement," by Mr. H. Howard Humphreys, the author of the useful and practical communication published in our last issue; "The Work and Influence of Augustus Welby Pugin," by Mr. P. W. Mulready; "Stained Glass," by Mr. Dudley Forsyth; and "The Organ, its Proper Position and Architectural Treatment," by Mr. F. C. Eden. The only question in our mind is whether some of these subjects might not have been still more advantageously considered at the larger general meetings of the Association. The distinction between the two, of course, is that the larger meetings are for the reading of a pretty full paper on a given subject, the discussion being secondary; whereas at the Discussion Section discussion is the main object, and the papers ought to be short, and calculated to make suggestions and start discussion rather than to exhaust the subject. Writers of papers for the Discussion Section will be wise to bear this in mind, and keep their communications brief and comprehensive; otherwise the Discussion Section may lose its proper function and become too much like a repetition of or rival to the general meetings.

Higher Elementary Schools.

The Board of Education has recently issued "rules as to building" higher elementary schools. By Article 110 (6) of the Code the number of scholars in a school of this kind is limited to about 300. For a school of the maximum size the new rules require ten classrooms, of which at least four must be suitable for classes of forty scholars. A classroom for forty scholars must have an area of about 620 square feet, and one for thirty scholars about 480 square feet. These areas are considerably in excess of the requirements for elementary schools. The desks must be single, 2 ft. long, and arranged in pairs with intervals of 2 in., and gangways of 2 ft. Laboratory accommodation must be provided, generally one for chemistry and one for physics; 30 square feet of floor space must be allowed for each scholar, the minimum size of each room being 600 square feet. Proper fittings must be provided, and a balance-room may also be included. A lecture-room with an area of 750 square feet is said to be desirable, together with a small preparation room. A drawing-classroom for "the more advanced drawing" should contain 30 square feet of floor-space for each scholar, the best size being a room with 750 square feet. If the building is planned with a central hall, and if this is properly lighted, it may be used for the drawing class, good dimensions for such a hall being 50 ft. by 25 ft. As an alternative, the hall may be used as a gymnasium, an area or 1,800 square feet being required for a school of 300 children. The gymnasium should not be adjacent to the laboratories. Special rooms for cookery, laundry work, and manual instruction should be provided in accordance with the rules in Schedule vii. of the Code. It is to be hoped that the issue of these rules betokens a desire on the part of the Board of Education to encourage the erection of higher elementary schools, but in the present unsettled state of local educational authorities it is doubtful whether much progress will be made in the immediate future.

St. George's Church, Botolph-lane, E.C.

An Order in Council has been made for ratifying a scheme of the Ecclesiastical Commissioners for effecting a union of the two rectories of St. Mary-at-Hill with St. Andrew Hubbard and St. George, Botolph-lane, with St. Botolph, Billingsgate. The scheme provides for the constitution of one consolidated benefice, with the Church of St. Mary-at-Hill as the parish church, and for the demolition of the church of St. George, Botolph-lane. The latter church, which has been closed for some five or six years past, was built in 1672-4, at a cost of 4,510*l.*, from Wren's designs. It is built of stone, and has a plain exterior, but it presents some pleasing features characteristic of Wren's London churches—a tower that rises directly from the ground, and a solid unbroken basement story which gives a stability of appearance to the entire structure. The tower, 16 ft. square at the base, rises by three stages to a total height of about 85 ft.; it has a cornice and a dead-panelled parapet, with angle piers which carry vase-shaped pinnacles. In the interior two Corinthian columns, widely spaced, on each side, divide the aisles from the nave. The roofs of the aisles are flat; the nave roof is arched in sections. There is a reredos of oak with a Corinthian order. The church, which was repaired in 1836, and again in 1884, measures 54 ft. by 36 ft., and is 36 ft. high. The rectory passed from Bermondsey Abbey to the crown at the Dissolution. Since the Great Fire the parish has been united with that of St. Botolph, Billingsgate. The Commissioners further provide for the removal to St. Mary-at-Hill church of the font, communion-table, sacramental plate, organ, carved woodwork, and other fittings, now in the church of St. George; but if any of those fittings are not needed for St. Mary's they will be transferred to a new church, which, with a parsonage house, it is proposed to build in or near London with the proceeds of the sale of the site and materials of the church of St. George. The provision for transferring the organ to St. Mary-at-Hill seems indeed absurd on the face of it, as that church possesses already an unusually large and fine organ with a fine carved case.

The Grammar School, Monmouth.

Plans have been prepared by Mr. Henry Stock, architect to the Haberdashers' Company, for new school buildings at Monmouth. In 1614 William Jones—who made other large benefactions to the Company—gave a sum of 9,000*l.* to the Haberdashers for the endowment of a preacher, a free school, and almshouses for twenty aged poor in Monmouth. The Company expended 3,400*l.* in the purchase of a site and the erection of the several buildings, including houses for the schoolmasters and preacher, or lecturer, and bought an estate of 349 acres at Hatcham, New Cross, to furnish an income for the charity. A scheme was made by the Court of Chancery in July, 1854, for regulating the amounts of various payments to the beneficiaries under the trust. In an official return made twenty years ago the annual income of the endowment is given as 4,507*l.* 7s. 5d., of which amount, it seems, a yearly sum of 3,207*l.* 7s. 5d. was appropriated to the school, and one of 1,000*l.* to the almshouses and almspeople. The Haberdashers' Company rebuilt the almshouses, in 1842, at a cost of 7,000*l.*

Pictures by the late W. Stott.

We do not know that it was much of a kindness to the late Mr. William Stott—"of Oldham" (as he chose to call himself), to have got together a collection of his pictures for exhibition. He was an artist who had genius, very much marred by eccentricity and (apparently) imperfect training. It was only in such recent works as "The Awakening of the Rose" and "Autumn," both which are here, that he seemed at last to have hit on a settled path in art which would have been worth pursuing. The "Rose" is a remarkable picture, both in colour and conception; and the portrait of a man in a seaman's dress

is a good piece of effective and straightforward portrait painting. Most of the other works (in the Water-Colour Society's gallery) we prefer, on the principle "de mortuis nil nisi bonum," to pass over. The preface to the catalogue, written by a popular novelist who appears to have been a friend of the painter, is one of the most absurd pieces of extravagant adulation we have ever seen even in catalogue prefaces. The unfortunate painter might well have said, "Save me from my friends."

THE ROYAL INSTITUTE OF BRITISH ARCHITECTS:

ANNUAL DINNER AND VISIT TO GLASGOW.

The annual dinner of the Royal Institute of British Architects was held in Glasgow on Thursday last week, at Windsor Hotel, St. Vincent-street, many architects from London and the provinces being present. The chair was occupied by the President of the Institute, Mr. William Emerson, and among other gentlemen present were Principal Story, D.D., Sir James Marwick, LL.D., Town Clerk of Glasgow; Sir Thomas Drew, P.R.H.A., Bailie Cleland, the senior magistrate; Dean of Guild (Mr. Robert Gourlay), Professor George Adam Smith, D.D., Mr. Alexander Cross, M.P., Mr. John Wilson, M.P.; Mr. John Belcher, A.R.A, Mr. Thomas E. Collcutt, and Mr. John Slater, Vice-Presidents of the Institute; the Deacon-Convener (Mr. James Macfarlane), Mr. C. H. Dick, President of Glasgow Chamber of Commerce; Dr. James Finlayson, President of the Faculty of Physicians and Surgeons; Mr. W. R. Copland, Chairman of Glasgow Technical College; Mr. James Fleming, President of Glasgow School of Art; Mr. C. H. Channon, President of York Society; Mr. J. E. Christie, President of Glasgow Art Club; Mr. C. E. Whitelaw, President of Glasgow Architects' Association; Bailies J. King, Shearer, Sorley, Maclay, and W. F. Anderson; Mr. J. J. Burnet, A.R.S.A., President of the Glasgow Institute; Mr. J. M. Taylor, LL.D., Dean of the Faculty of Procurators; Professor Gourlay, Mr. Ernest George, Mr. William Fawcett, F.S.A., Mr. F. H. Newbery, Mr. Henry F. Kerr, President of the Edinburgh Architectural Association; Mr. John Muirhead, President of the Institute of Measurers; Mr. Alfred Darbyshire, F.S.A., President of the Manchester Society; Dr. Donald Mackintosh, Mr. Thomas Mason, Mr. S. Perkins Pick, President, Leicester Society; Mr. Frank Caws, President, Northern Association; Mr. Arthur Clyne, President, Aberdeen Society, Mr. W. J. Locke, secretary of the Institute; and Mr. C. J. MacLean, secretary, Glasgow Institute. The croupiers were Mr. Leonard Stokes, Mr. E. W. Mountford, Mr. Alexander Graham, F.S.A., hon. secretary of the Institute; Mr. Edwin T. Hall, Mr. P. Gordon Smith, and Mr. Henry T. Hare. Among other gentlemen present were Messrs. E. Boardman, H. D. Searles Wood, A. B. Plummer, H. G. Ibberson, Clyde Young, A. Hessell Tiltman, R. S. Balfour, W. A. Pite, E. J. Milner Allen, T. W. Cutler, G. Guthrie, R.S.A., J. H. Pentland, R.H.A., W. Flockhart, J. D. Crace, Hippolyte J. Blanc, R.S.A., J. J. Stevenson, F.S.A., John Honeyman, R.S.A., C. Harston, A. Cullen, W. Forrest Salmon, W. Henman, G. D. Oliver, Geo. Frampton, A.R.A., J. Keppie, J. Douglass Mathews, Campbell Douglas, J. Ely, Aiex. McGibbon, W. Kerr, T. Martin Cappon, W. Tait Conner, J. Lochhead, D. R. Niven, Wm. Leiper, W. Reynolds-Stephens, H. K. Bromhead, J. C. Nicol, and J. Salmon, the company numbering nearly 200.

After dinner, the Chairman read letters of apology for absence from Lord Rosebery, Sir James King, Sir John N. Cuthbertson, Sir Francis Powell, Mr. Aston Webb, Dr. Rowand Anderson, and others. He also stated that the Imperial Union Club of Glasgow had made the members of the Institute honorary members of the Club during the period of their meeting in Glasgow. He was sure they would join in passing a vote of thanks to the Club for their kindness. This having been heartily agreed to,

The Chairman proposed the toast of "The King." He said that for the first time in the history of the Institute the first toast of the evening had to undergo a change. The King, shortly after the death of Queen Victoria, at the request of the Institute, very graciously consented to become their patron, and also promised to continue the presentation of their annual gold medal. For this they were greatly indebted to his Majesty, for there was no art that tells in history of the greatness or the aspirations of a country better than the work of architects. Architecture could be greatly influenced by royalty, by the interest which a monarch took in their art, and the King had always shown considerable interest in the arts of the country. He believed the art of architecture, the mother of all the arts, would be greatly influenced during the reign of King Edward.

The toast having been honoured, as was also that of "Queen Alexandra, the Duke and Duchess of Cornwall and York, and the other members of the Royal Family," (which was likewise given from the chair),

Mr. John Belcher, A.R.A., gave the toast of "The Houses of Parliament." Educational matters and scientific questions were not, he said, neglected by the Houses of Parliament, but the consideration of the art of architecture was apt to be regarded by Parliament as not so much a necessity as a luxury, which an economical Government did its best to avoid. What was to be learnt from Glasgow as to that? The answer to that was: the Exhibition buildings, which had conduced so much to the financial success of the Exhibition. There were also the municipal and other public buildings of Glasgow; in fact, this great city, given over to work and commercial interests, had not forgotten art, for it was clever enough to know that art paid, as well as gave pleasure. Another pleasing effect which one observed in Glasgow was that the people loved their work and took a pride in it, and this it was which art enabled them to give expression to in their buildings, and it was this feeling in Glasgow which they wanted the Houses of Parliament to have. As was well known, new public offices were about to be put up upon magnificent sites, and it seemed to be the opportunity of the century to beautify the very centre of Imperial government, and to express by the buildings something of the dignity and importance of the matters carried on there. In deference to public opinion, he believed, two able architects were selected to make designs for the buildings, but, as every one deplored, those gentlemen did not live to carry out their designs. The carrying out of the designs would have been the most important part of the work, and he was convinced that the great experience and knowledge of Mr. Brydon and Mr. Young would have enabled them to carry out their work with great success. It was now proposed to put the matter into the hands of the Office of Works! Now, in going to war Parliament would appoint the best generals they could to carry it out, and should one be recalled or killed, his place would be immediately taken by another general. That he believed was the procedure in other Departments. Then why not in the case of public buildings? How many great architects were employed before St. Peter's at Rome was completed? If the history of a nation were read in fine architecture, then these buildings would represent to posterity the indifference and apathy of all concerned. He did not wish to find fault entirely with Parliament in this matter, for Parliament only represented the general apathy. In proposing the toast, and in coupling with it the name of Mr. Alexander Cross, he expressed the hope that that gentleman would use his influence to see what could be done to get Parliament to treat the art of architecture with greater respect and consideration.

Mr. Cross, M.P., in the course of his reply, said, in regard to the duties of Parliament towards the architecture of the country, he believed that Parliament had to some extent risen to the occasion. Nowadays we did not destroy our old monuments, and we did not make our old castles and other old buildings quarries for material for building farmhouses; and he thought the same spirit would enable them to rise to the occasion in the erection of public buildings. As to the two public buildings in question, although it had been announced as the intention of the Government to entrust the carrying out of the detail of one of those buildings to the Office of Works, the other building, the War Office, was entrusted to the son of the deceased architect, and in his (the speaker's) opinion no better appointment could have been made. As to the other building, should there be any occasion for raising the question of a better arrangement being made for carrying out Mr. Brydon's design than the one proposed by the Government, he did not think that any considerations of economy would be likely to interfere with the realisation of a better arrangement. He had been much struck at the improvement in the architecture of London; and in contrasting the buildings erected twenty-five years ago with those erected now, especially in some of the suburbs, he had been much impressed by the enormous development which had taken place. He had visited foreign cities and many parts of Europe, and he doubted whether in any other city they would see finer modern examples of the art of architecture than were to be seen in the new parts of London.

Mr. John Slater, B.A., then proposed the toast of "The Corporation of Glasgow." The history of the country, so far as regards its peaceful reform and progress at home, was written in the archives of the municipalities of the kingdom. In early days, for security of trading, people banded themselves together in associations which were called trade guilds, and these soon developed into the famous communities of merchants' guilds, gaining enormous power. It was a most interesting story how the trade guilds, as opposed to the more select merchant guilds, gradually acquired powers of their own and then merged with the merchant guilds, and so became the nucleus of the municipalities. The development went on on the same lines all over the country, retarded here and accelerated there by local causes, but in all cases the result had been very much the same, whether the head of the community was the Lord Mayor of London or the Lord Provost of Glasgow. There could be no doubt that the fine organisation which was controlled by the Glasgow Corporation was the result of small accretions and extensions from time to time and that the corporation was doing now for that great city much the same sort of thing that was done 800 years ago when market tolls and that sort of thing were regulated. In the south of England the efforts of various municipalities to obtain increased powers had been viewed with some disfavour, especially when they had gone into trading affairs, such as gas, tramways, &c., but he could not but think that it was to the interests of the community that the corporation should control such monopolies because, if properly managed, they must result in profit, and it was far better that the profit should be shared by the whole of the citizens than go into the pockets of private shareholders. He thought that even Glasgow might go further. They looked after the physical health of the people; why not look after their mental and moral health? They had municipal bands; why not municipal theatres, public-houses, and even music-halls? The cost of crime, pauperism, and drunkenness was considerable, and when this cost was increased by the wretched surroundings in which numbers of people of such a city were compelled to live, he thought that, from the money point of view, it would be well to take in hand the amusements and recreations of the people. He thought that some city like Glasgow might take in hand this work. Glasgow had made enormous advance in greatness and in many other ways, but size was not everything, and it was to be hoped that the Corporation would take in hand the beautifying of the city and the brightening of the lives of its inhabitants.

Bailie Cleland, in response, referred to the absence on the high seas of the Lord Provost, who, but for his departure on a well-earned holiday, would have been present. It was always gratifying to the Corporation to know that their efforts in the interests of the city and their labours to promote the well-being of the citizens were appreciated and valued by those outside of the civic arena. It was to him, and he was sure he spoke for the other members of the Town Council, peculiarly pleasing to be assured of the good opinion which the Royal Institute of British Architects entertained of the Municipality of Glasgow. Their approbation, he took it, was not based on sentimental grounds, nor was it prompted by considerations of courtesy merely. He believed that in their hearty reception of the toast they deliberately wished to give expression to their sense of the important work which, in a variety of directions, the Corporation was endeavouring to perform. None of the important bodies which had visited Glasgow

this year, and whom the Corporation had been delighted to honour, was in a better position to judge of the value or otherwise of the various ramifications of civic enterprise than the Institute of Architects. The Corporation, in almost every one of its Departments, was indebted to the architectural profession, for to it they must look for adequately housing the hundred and one interests which the Town Council controls. Much of the success which had attended the operations of the Corporation, and a great amount of the commendation which it had received from the strangers who had from time to time been within its gates, for the manner in which it had faced the various municipal problems, must be attributed to the enlightened manner in which their own staff of capable architects, as well as those talented professional men outside, whose assistance they had been fortunate in securing, had interpreted the requirements of the City, by designing not only handsome and ornate edifices, but also structures which combine with their external perfections commodious and appropriate internal equipment for the purposes for which they have been erected. He invited the members of the Institute of Architects during their meeting in Glasgow to inspect the various buildings in which the Departments of the Corporation are housed, not to speak of the tenements of dwelling-houses which had been erected for the working-classes under the auspices of the City Improvement Trust, the policy of which had been largely controlled by the present Lord Provost, who had lived to see his efforts crowned with the most gratifying success. The tenements which the Corporation have thus erected were intended to supply the working-classes, at a moderate rent, with houses in which they will be able to live with their families under conditions of greater comfort and happiness than was possible in former days. He thought no architect could address himself to a nobler task than that of designing houses for the artisan classes of such a character as to secure at once a pleasing elevation to our public streets and a fit habitation which would more nearly interpret the proverbial phrase that "Every man's house is his castle," than had yet been possible. The idea had often occurred to him when viewing the long vistas of our public streets that greater variety might be introduced and a larger amount of genius displayed in the designing of ordinary street architecture, so as to do away with those continuous lines of tenement of almost geometrical formation, each one like its neighbour, which our present system presents in monotonous regularity. He knew that the answer to this statement would be that it had not been possible for architects to effect any great improvement in the direction he had indicated, as they were restricted by the requirements of their clients, whose desire often was to obviate unnecessary cost in construction, while securing all needful accommodation and facilities. Builders might argue that, from an æsthetic and sentimental point of view, such designing might present a more artistic exterior, but that that had nothing to do with utility. Be that as it may, and whether we were all severe utilitarians or not, he could not allow the opportunity to pass without appealing to the gentlemen in whose hands the architectural reputation of the country rests, to endeavour to break away from the hard and fast rules which apparently obtain in the matter of the domestic architecture of large towns.

Ex-Bailie Shearer, in proposing the Royal Institute of British Architects and Allied Societies, traced the progress of the Institute since its foundation in 1834, and dwelt upon its objects. What greater boon could be given to a city than healthy homes? And what could make life in a city sweeter and brighter than the embellishment of that city by artistic buildings and beautiful parks? Although Glasgow was a city of toilers, they could point to beautiful spots in their midst, and to buildings worthy of a visit even from the Royal Institute of British Architects. Architects had taught them that light, airy, and sanitary dwellings for the poorest should be always associated with beauty of line and harmony of colour, and that grace, dignity, and beauty should always be associated with our public buildings; and that teaching they would strive to carry out. With the toast he coupled the names of the President of the Royal Institute of British Architects and the President of the Glasgow Institute of Architects.

The Chairman, in responding for the Royal Institute, said it was the first time in the annals of the Institute that their annual dinner had been held in Glasgow. He would like to impress upon them this point, *i.e.*, that the Institute is not the Royal Institute of English Architects, but the Royal Institute of British Architects. It took in the whole of the British Empire—England, Scotland, Ireland, and Wales, the Colonies, and India. In all these there were societies in alliance with the Institute. Their numbers, including the allied Societies, amount to nearly 3,000. The Charter was granted by King William IV. in 1837, which year was also the first of Queen Victoria's reign, who graciously became their patron. In 1887, in order to bring the powers of the Institute more into line with the work it aspired to accomplish, and to render the fact of membership to a certain extent a test of proficiency, the supplemental Charter of the fiftieth Victoria, conferring among other privileges power to hold examinations and issue certificates or diplomas, was granted, the document receiving the Royal sign Manual on March 28, 1887. Since then large numbers of candidates had each year presented themselves for examination. When they got a body of men like this spread all over the Empire with one object in view, there ought to be no doubt of the success of their aims, and he did not think there could be any doubt as to the eventual success of those aims, which were the advancement of their art, and the elevation of the profession of architecture. When at a great city like Glasgow, in a country the birthplace and home of so many eminent and shining lights in the history of culture, and art and science, men were brought together from all directions as a means of promoting good feeling amongst the members of a great profession, and to extend its influence, there certainly should be good fruit borne. It was a peculiar pleasure to them to hold the first Royal Institute of British Architects' dinner of the new century in Glasgow with their allied society, for the people of Scotland had always taken a prominent part in the advancement of the arts and a leading position in things appertaining to culture—Edinburgh had been dubbed our modern Athens. In literature, the mention of only one or two names such as Burns, for instance, with his tenderness and genius for descriptive power, passion, and love of Nature; or Professor Wilson, in the exuberant humour and force displayed in the "Noctes Ambrosianæ"; or Scott's, whose works had charmed them all, and did so much for the revival of Gothic architecture; and the deep influence over all thinkers of the works of Thomas Carlyle, claim for Scotland a place in the first rank of letters. In painting, such names as Sir David Wilkie or Sir Henry Raeburn and David Roberts, a name ever dear to architects, claim also for Scotland a foremost place in the rank of great painters. And in architecture, names like the brothers Adam, Fergusson, and the Mylne family, who for twelve generations had been designing and carrying out important works, were sufficient also to place Scotland in the first rank of architectural art. Of late years, the experience of their Institute, if it told them anything, pointed to great progress in the work of their students in architecture, which promised well for the future of their art in this new century, and Scotland was well to the forefront here. Many of their best medals and prizes had been carried off by the young architectural students of Scotland during late years, and the young Englishmen and Irishmen would have to look to their laurels. The Royal Institute of British Architects knew no partiality; progress in the art of architecture was what it wanted, and all honour was given to whom honour was due. Glasgow itself and their allied society had done much for architecture of late years. The art galleries and municipal buildings, as well as many other works, proved its desire to foster an art in a manner worthy of the great Empire of which it formed a part, and the Exhibition buildings showed a restraint and excellence in this class of design which he had only seen equalled or surpassed by the World's Fair at Chicago, where there was no rococo extravagance of detail, but a fine monumental effect, grand and imposing—a city of palaces; and it was a pity the buildings were only temporary. At Chicago they had, however, the advantage of unlimited means; and a consensus of taste of a large committee, formed of architects, artists, and sculptors, not only Americans, but also from the pick of Europe, ruled the schemes. He felt sure that the high objects and interests for which the Institute was formed and obtained its charter—namely, the advancement of the art of architecture and the dignity of the profession—would be worthily upheld and maintained by the Glasgow society. From the work of architects would be derived the impression that future generations would have of our national greatness or meanness, our high or our low aspirations, rather than from all our wars, or even from all our other arts. It was, therefore, no mean task they found themselves engaged in at the beginning of this century in the striving to carry out the views of those who were the founders of this great Institute of British Architects. Let them pull well and honestly together, and their influence must increase yearly and should, before long, obtain for them some proper legal recognition as a great profession on wise lines that would materially advance the ends they had in view. If advancement of the art of architecture was the principal of these ends, then the voice of this Institute and its allied societies should give no uncertain sound on all important public projects where architecture was concerned. In the extension, improvements, and rebuilding of our great Metropolis and of the large provincial centres, and also in great Government and other public buildings, surely it was the consensus of the architects opinions which should be the guide and should carry the greatest weight. We saw much discussion in papers and journals by artists engineers, and Parliamentary Members, County Councilmen, and others on questions of public improvements and the erection of public buildings, but how often had any of these individuals the proper qualifications to lay down the law on such subjects? It should be the consensus of opinion of an Institute like theirs, with its allied societies, that should carry the most weight if they would only, in a public-spirited manner, let themselves be heard on such matters. But if they expected their influence as a body of professional men or as an Institute to have weight they must all be true to themselves and consistent in their conduct. He mentioned this because there seemed a spirit abroad that the rush for employment caused sometimes, either under the temptation of personal interests or the chance of some great architectural prize, actions or words subversive of the very principles of professional conduct which they had themselves laid down. Such action must quickly cause the influence of an Institute like theirs to wane, nor would their word or opinion on momentous public questions of policy in regard to their art receive much respect from the public or those in authority if it be found that their utterances were inconsistent or intended to serve selfish interests. Any influence their profession might be able to exercise, and the history of its late years showed it had considerable, must be above suspicion and apart from party or personal ends. Let them do nothing to weaken their position, and endeavour to act amongst themselves as they wished the public to act by them.

Mr. J. J. Burnet, in the course of a brief reply, said the Glasgow Institute had watched with intense interest the endeavours they had been making to increase the public appreciation of architecture in the Metropolis, and had recognised with no little pride the eagerness with which the counsels of the Institute had been sought, not only by the Government, but by the various municipal and other authorities throughout the country; and while in some few cases the advice of the Institute might not have met with the unanimous approval of the profession which one would have desired, he did not think that great weight need be attached to such criticism. In their art they learnt to wait for the verdict of future generations, who alone were able to judge how far the men whom the Institute may have placed in important positions had warranted the choice and done honour to the profession to which they belonged. The Glasgow Institute, as a corporate body, as well as individually, were endeavouring quietly to meet the various responsibilities of our time, and he ventured to believe that the presence with them that night of so many of Glasgow's eminent citizens, and the reception given to the toast on this the first visit of the Institute to Glasgow, might be looked upon as some proof that the city was steadily growing in its appreciation of architecture. They could not

hope that in a large commercial and industrial centre like Glasgow the art of architecture would be generally understood and appreciated, but they knew that amongst those responsible for the various municipal and private schemes there was a growing conviction that such schemes would remain monuments, not only of commercial and industrial enterprise, but would be looked upon as indicating their state of culture at the time, and the need then felt that the material surroundings should be in sympathy with the deeper needs and loftier aspirations, and they looked forward with confidence to the growth of this feeling, eager to render themselves more competent to give it expression.

The remaining toast was "The Guests," which was humorously proposed by Mr. Campbell Douglas and acknowledged by Mr. John Wilson, M.P., who referred to Glasgow Cathedral as a building which not only answered the purpose for which it was designed, but owed its beauty, not to meretricious ornament, but to its form.

The company then dispersed after singing "Auld Lang Syne," after which some of the party proceeded to the Imperial Union Club.

On the following day, on the invitation of the President and Council of the Glasgow Institute of Architects, a large party of ladies and gentlemen partook of luncheon in the Grosvenor Restaurant in the Exhibition grounds.

After luncheon the Chairman, Mr. J. J. Burnet, President of the Glasgow Institute of Architects, proposed the toast of "The King," and briefly but cordially welcomed the guests.

Mr. Emerson said that after the very hearty welcome the Glasgow Institute had extended to the Royal Institute they could not separate without toasting the President and members of the Glasgow Institute. In any profession like that of architecture, the distance at which members practised from one another caused them to know very little of each other, and in the different localities in which they practised there were differences in views on certain public questions affecting architecture, and there were also different modes of working in most organisations. But such meetings as they were having in Glasgow tended very much to enlarge their minds by an exchange of views and by a realisation of the differences of opinion which existed. Moreover, there was rather a tendency to think slightly of people one did not see or know, but such meetings did away with these ideas. He had learnt a good deal during his visit to Glasgow, and he was sure others from the south had done so.

The toast having been heartily received,

Mr. Burnet, in response, expressed regret that the visit to Glasgow had not been arranged for a longer period.

Mr. W. F. Salmon suitably proposed "The Ladies," Sir Thomas Deane responding.

The proceedings then terminated. In the afternoon a large party of architects, ladies, and friends visited the University on the invitation of Principal Story and the Senate of the University. The guests inspected most of the principal rooms in the building, including the Hunterian museum and the library, where tea was provided.

In the evening a reception was given by the Corporation of Glasgow. The guests promenaded the salons and corridors of the Municipal Buildings, and at 8.30 there was an adjournment to the banqueting-hall, where Bailie Cleland, in the absence of the Lord Provost, occupied the chair. The Chairman, after welcoming the members and friends of the Institute, remarked that Glasgow as a city had no reason to be ashamed of the examples of architectural skill which her thoroughfares presented, and he could safely say that in the city members would find many most interesting examples of both ancient and modern architecture. He felt that the influence of such meetings as those of the Institute of British Architects and of the other important organisations which had preceded it was of no ephemeral character, but rather of far-reaching and lasting importance on the life of the community in whose midst they were held.

Mr. Emerson expressed the thanks of the Royal Institute of British Architects to the City and Corporation of Glasgow for their kindness to the members of the Institute during their visit to Glasgow. Glasgow had done a good deal in furtherance of the art of architecture, and no one could go about the city without learning something from the great public buildings which had been erected. He had been particularly impressed by a visit to the enormous power station for the electrical supply to the tramway system, where some of the engines had fly-wheels weighing 120 tons. Similar sensations could be caused by works of architecture, and probably no greater sensation could be caused than by a visit to a great cathedral. No one who went through the Glasgow Exhibition art galleries or saw the buildings of the city could fail to realise that the city took pains to encourage the erection of works which should be architecturally pleasing and interesting, and add to the lustre of the British Empire.

Mr. Burnet briefly addressed the audience, remarking that no corporate body of the citizens of Glasgow was more anxious to be of service to the city than the Glasgow Institute of Architects.

An excellent programme of music was gone through during the evening by Herr Iff's orchestra and the Corporation band, while vocal music was given by the Glasgow Glee Party. A very enjoyable evening was spent by the large party present.

MAGAZINES AND REVIEWS.

The *Art Journal* has an illustrated article on "The Minor Sculptures of the Certosa of Pavia," that building of multifarious detail and never-ending interest. The article is by Professor Melani—a translation we presume; he gives some information as to the names of artists presumably connected with the work, though we feel rather sceptical as to the authenticity of these ascriptions. Among the details illustrated are the carving on one of the choir stalls, a bronze candelabrum of great richness and beauty, and the carving of the capitals and entablature of the principal doorway. An article of more exceptional interest is that by Mr. Arthur Tomson on some of the less-known pictures of Millet. They are illustrated from photographs which came into the writer's possession through a friend who had picked them up somewhere in Paris. They belong to the early period of Millet's art, when he painted chiefly nude and classic subjects, and will be a revelation to those who know him only by pictures of the class of the "Angelus" and the "Sower." One or two pictures by Millet of this period have found their way into London exhibitions, and have been noted in our columns; but none so remarkable as those that are here illustrated. About two of these, "Les Baigneurs" and "Le Sommeil de Venus," there is a power reminding one of Michelangelo. It may be as well for the world that Millet in his later period adopted peasant life as his subject, for otherwise we should have missed the most remarkable illustration of that class of life in painting; but we are disposed to think that he was really a greater artist in these very different works of his earlier period. Ought not some effort to be made to collect and exhibit these earlier works of Millet's? It would be an exhibition of rare interest, and would revolutionise popular opinion in regard to this remarkable artist.

The *Magazine of Art* contains an article on a very interesting subject, "Idealism in Contemporary French Painting," by M. Camille Mauclair; probably a translation. He regards what he calls Idealism (the nature of which is best illustrated by the examples from M. René Ménard and others) as a distinct movement in French painting, which has succeeded to Impressionism. Henri Martin, to whom he does not quite do justice, was one of its earliest apostles. We quite agree as to the spiritual beauty of the compositions of M. Ménard, which form the bulk of the illustrations. The essay is to be continued in another issue. The "Decoration of Upright Pianos" is treated by Mr. Aymer Vallance, whose criticism on the subject is good and suggestive. We quite agree with him as to the first illustration which he gives having nothing of the appearance of a piano; it might be a sideboard. Bechstein's piano for the North German Lloyd Company is, on the other hand, too *rococo* and the other more classically-lined examples are somewhat too square-cut; no example of those given is what we shall call an ideal design. Mr. Ogilvey's piano with folding doors, for Messrs. Broadwood, is excellent in style, but the doors standing open on each side of the player are a nuisance. Mr. Vallance's suggestion at the close, as to acknowledging more, in the shape of the case, the vertical arrangement of the strings, merits consideration. We must protest against ornament being applied to the keys themselves. Mr. Vallance recognises, indeed, that they ought to appear as a general contrast of black and white, but he proposes that the upper surface of the keys may be enriched with "delicate filagree ornament." That is entirely out of place, and distracting to the player. The glory of the keys lies in what is done with them, not in their appearance; and they should be left perfectly plain.

The *Artist* contains an article on "Ancient Peruvian Pottery," with some curious examples from a private collection about shortly to be dispersed—that of Sir Spenser St. John, formerly the English representative in Peru. "Garden Sculpture especially in reference to the Fountain," by Mr. P. G. Konody, is a good subject in itself, but seems introduced here only to illustrate the work of one artist, or rather of two who work together, and the designs are somewhat eccentric and not very pleasing in line. A charming frontispiece to the number is formed by a study of a head in red by Mr. Greiffenhagen, whose pictures form the subject of an article.

The *Berliner Architektur-Welt* contains illustrations of a fine piece of school architecture by Herr Hoffmann, the "Parish School" (equivalent we presume to our "Board School") in the Dunckerstrasse. It is, however, a building of greater size and more formal treatment than a London Board School building. Externally it is a brick building with thin stone courses at intervals, which are made lineable with the heads, sills, and transoms of the windows, thus binding the whole together. The interiors, though not ornate, are treated with some view to effect, especially in the use of decorative ceilings with flat ornament of somewhat Elizabethan character. The plan is extremely simple; a long parallelogram with the administrative entrance and offices in a centre block, and large hall over, the wings right and left symmetrically arranged for boys on one side and girls on the other, with their entrances at the ends. The whole seems an admirable building for its purpose. A good deal of space is devoted to competition designs for churches and other buildings at Grunewald. The square or nearly square plan seems rather in favour for the churches; very much diversified externally, however, by a collection of gables and other features. The designs are of what in this country would be thought a very weak Gothic type.

The *Architectural Review* (Boston), Vol. VIII., No. 9, contains an article by a Mr. Edward R. Smith, Reference Librarian in the Avery Architectural Library, Columbia University, on "Architectural Periodicals;" an article which shows a good deal of ignorance and the usual determination to write up everything French. He has even the assurance to say that the illustrations in English journals "are disappointing to one accustomed to the superb plates of the great German and French journals." Perhaps he will state *what* French architectural journal it is the illustrations in which are equal to those of the best English journals? The *Revue Générale*, we admit, was superior to any English journal in this respect, but it has been extinct for twelve years, and it was a monthly publication—not even that in fact, for it published just when convenient; and the writer of the notice referred to must be very ignorant if he does not know that illustrations to a monthly paper are got up and printed under conditions quite different from those by which weekly publications are governed, and much more advantageous, and that any comparison between them is entirely misleading. This is the case also with the German publications; those that are referred to as having such fine illustrations are monthlies, not weeklies. If there is a single weekly architectural publication in Germany with illustrations comparable to those of the English architectural journals, we shall be glad to hear of it. We have never come across any such, and we think Mr. Smith will be puzzled to find one; and that our readers who know the French journals will be amused to read that *La Construction Moderne* is an architectural paper superior to the English ones.

The *Antiquary* contains an article, by the Rev. E. Maule Cole, on "Norman Features in Wold Churches, East Riding, Yorkshire;" meaning the churches of the Chalk Wolds of the East Riding—little known, the author says, even to Yorkshiremen. In 1070 the whole of

this district was devasted by order of the Conqueror, and the existing churches would have been then destroyed or so much injured as to require rebuilding when the manors were eventually portioned out among Normans. The object of the first devastation is not mentioned — perhaps is not known. But the circumstances, as far as known, explain the existence of a good deal of Norman work in the churches of the district, which are mentioned and described. The article will open to some architectural tourists a new corner of interest in England. The same number contains the concluding portion of an article by Mr. W. H. Jewitt on the interesting subject of "Winged Beings" and their delineation in art.

In the *Engineering Magazine* Mr. Longmuir's article on "Opportunities for Bettering the Work of the Foundry" should have the attention of foundry managers. He speaks strongly on the want of system in foundry work, and the content with which inferior plant is accepted, especially in the matter of moulding machines.

"A moulding machine is installed, but not operated. The preliminary expense of this machine was met with pleasure, but the necessary accessories were fitted up on the cheap system. Moulding boxes were good enough without fitting, plates would answer quite well without any expensive machining up, and therefore the handy-man of the establishment prepared both the boxes and plates. This machine now stands in 'icy isolation,' a superb monument to the folly of the cheap system. The arrangement of the foundry is in keeping with the tools—no mechanical appliances of any kind, and every ounce of metal, every lift, is carried or performed manually. Boxes are stacked anywhere, and generally in the most inconvenient places. Foundry supplies are equally inaccessible, and the moulders spend no inconsiderable time in searching for material. . . . . The method of working is equally haphazard; the moulds are slovenly made, put down in any corner that strikes the man's fancy; hence all classes of work are indescribably mixed, and the appearance of the floor just before casting time is one of bewildering confusion.

The example quoted is not that of a foundry suffering from want of capital, nor yet that of an establishment making no profit, and many similar instances may be found amongst the jobbing foundries. If profits are made under these slothful conditions—and they undoubtedly are—then a most magnificent opportunity lies already at hand to increase these profits manifold."

The author proceeds to specify what should be the improvements made in order to realise this possible result. There is also an article on "The Rapid-Transit Problem in London," by Mr. F. J. Sprague, an American engineer of special experience in city railway working; so that we here have a criticism of the London system (if it can be called a system) from a foreign expert. Mr. Sprague is strong in condemnation of the useless weight and inconvenience of the heavy locomotives used on the Central London Railway, and advocates for our adoption what he calls the "multiple-unit" train.

"This is a method of train operation and control by means of which cars are equipped with motors and motor-controllers individual to these cars, so that they may be united with any number of other cars similarly equipped, or with any number which have no motors, into a train of any length, and operated from as many points as desired through a controlling line common to all cars. The number of the cars, their sequence, and their end-to-end relation are preferably matters of indifference. The character and capacity of the equipment is dependent upon the schedule required; it varies from every car, where the highest schedule is required, down to two cars in a train. Every motor car is a unit, and any combination of motor cars and trail cars may also be considered a unit, which can be operated from either end, and can be joined with other units.

Such a system readily lends itself to every condition of congested service. The similarity of equipment ensures flexibility of train operation, and provides a motive power proportioned to the requirements. Locomotive switching operations are abolished, trains can be reversed at any cross-over, and traffic concentrated on any section of a road.'

The adoption of some such system, if electrically-worked Metropolitan railways are further developed, seems almost a foregone conclusion.

In *Feilden's Magazine* the article on alternating current motors by Professor A. Hay is an extremely instructive one. He describes clearly the difference between synchronous and non-synchronous motors both for single phase and polyphase currents. Students will feel obliged to Professor Hay for clearing away the many difficulties in this somewhat abstruse branch of practical electrical theory. We cannot do better than recommend his article for their diligent perusal.

In the *Contemporary* "Vernon Lee" gives the second and concluding portion of her essay on "Art and Usefulness." Apart from what we have already spoken of as the central heresy of the writer's position, which confounds the intellectual suggestions and the intellectual enjoyment of art with mere usefulness, there is much more in this second part of the essay that we are able to sympathise and agree with than in the first part. The author seems indeed rather disposed to go back on her former position by admitting that "art cannot be enjoyed with initiation and training;" but she holds that wherever art has existed spontaneously, it has brought with it that initiation and training. "The initiation and training, the habit of understanding given qualities of form, the discrimination and preference thereof, have come, I maintain, as a result of practical utility." As far as decorative and industrial art are concerned this may be true; but where is the utilitarian basis of the ceiling of the Sistine Chapel, or of Titian's "Bacchus and Ariadne?" Was that wonderful picture-poem, at the time it was painted, any better understood by the uneducated of that day than it is by the uneducated of this day? The author is trying to push her theory to cover phases of art which it will not cover. In other parts of the essay we come on true and important reflections in regard to art. One of these is in regard to the "fragmentary, superficial attention" which, according to Vernon Lee, most of us give to a work of art; "and giving this little, we find that art gives us little, perhaps nothing, in return." Vernon Lee is rather too sceptical as to the real attention which lovers of art in this country do give to it, and the real enjoyment they derive from it; but it is true that such lovers of art are in a very small minority among us, and that this careless and superficial attention is the characteristic of the average modern English mind towards art. One reason that the French are a more artistic nation than we are is that they do consider art as something worth thinking about and discussing seriously, as if it were a thing of national importance; while by the English public mind it is regarded only as a kind of toy. Later on she endeavours to suggest the remedy for "this mal-adjustment by which art is divorced from life, and life from art." The better distribution of wealth, or of "work and idleness," will put an end to the exploitation of individuals in great gangs; "the workman will be able once more to see and shape what he is making;" in place, we presume is meant, of mechanically making a part of it only. It is perfectly true that the condition of labour hinted at—the prevalence of machine-made articles and machine-like labour, is one of the great hindrances in the way of industrial and decorative art; though unhappily we see little hope at present of any improvement in this respect. But this does not affect the fine or intellectual arts. A picture is still painted by one man and is the work of one brain; symphonies are written by one composer and are the offspring of one mind which sees and shapes the whole work; poems are not as yet produced by machinery. That consideration suggests the fallacy running through the whole article—the same fallacy which pervaded the teaching of William Morris—that art is the same thing as craftsmanship. In a healthy state of life all craftsmanship should be art; but all art is not craftsmanship. The "Fine Arts" still maintain their right to stand on a higher intellectual level.

The same number contains a thoughtful article by Professor Rawson on "The Nation, Apprentice, and Polytechnic." The main object of it is to show how tentative and partial are our efforts at technical education, and how limited is the use made of it, in comparison with that which is to be found in many Continental nations; and he urges that a higher objective should be given to technical education; not the mere learning of a craft, but the acquirement of general technical knowledge for its own sake, and as an important factor in the education of the mind. The article is worth serious attention.

The *Nineteenth Century* contains an able and most important article by Sir Herbert Maxwell on "The Sad Plight of British Forestry," a subject of national importance. Sir Herbert Maxwell goes very fully into the demonstration of our neglect of a great source of national wealth in not sufficiently attending to the cultivation of forest trees; and argues that much ground now devoted only to purposes of sport would be far more profitably occupied, to the nation in the end and to the private owner in the first instance, if allotted to the culture of forest trees. We have not space to follow out here the arguments and statistics given, but we consider the article to be perhaps the most important of any published this month, and one which ought to receive serious attention.

The *Century* contains an article by Mrs. Pennell on "Italy's Garden of Eden," which serves as a string on which to thread a host of small line sketches—some of them so small as almost to be called thumbnail sketches—by Mr. Pennell. It is a typical "popular" article, and one cannot say that either the pen or pencil portion of it is of any particular value. Mr. J. Mead Howells contributes an article on "A French Government School from the Inside"—an art "atelier" to wit; an article which, from the descriptions it gives of French student manners, and the treatment of newcomers in a studio, leaves one in doubt whether French art-students are more of lunatics or more of blackguards — at least unless Mr. Howells's description of them is very highly coloured.

Harper contains an article by Professor Flinders Petrie on "The Royal Tombs at Abydos," a short account of his recent discoveries, which has the additional interest of some illustrations of various articles of artistic character found in the tombs, including what the Professor calls "the oldest group of jewellery known in the world." The perfection of the soldering in the very ancient goldwork is commented on. "In no case can the joint be detected with a magnifier, either by colour or excess." The abundance of vases cut in hard stones is also remarkable. Some 500 different forms have been made out from the fragments remaining, and the materials include rock-crystal, obsidian, diorite, gneiss, syenite, granite, slate, marbles of different colours, &c. The importance of the discoveries, in the opinion of Professor Petrie, is that they give us the turning-point of Egyptian art, which till the time of King Zer was archaic and tentative, but during his reign of probably fifty-seven years became crystallised into the forms the character of which varied little for more than 4,000 years later. The same number contains some examples of new illustrations to "Alice in Wonderland," by Mr. Peter Newell, who expresses the highest appreciation of Tenniel's illustrations, but craves leave to try his own reading. His figures of Alice do not quite satisfy us—perhaps they are based on the American rather than on the English child; but in every other respect his illustrations are masterly in humour and in power of drawing.

Scribner devotes "The Field of Art" to a consideration of M. Bartholome's great sculptural work, the "Monument aux Morts," signed with the initials of Mr. Russell Sturgis, who, writing with great sympathy and admiration for the French sculptor's work, makes it the occasion to consider the question whether sculpture can rightly abandon the character of quietness and immobility. We hardly see that the question is specially raised by M. Bartholomé's alto-relief groups, which, though poignant in emotional expression, cannot be called violent or strained in action. The question of realism in the rendering of age and youth in the various contrasted figures, also touched upon, is undoubtedly suggested by this work; and it may perhaps be admitted that this realism is carried so far as to be rather a disturbing element in the work from a purely artistic point of view. It may be argued, however, that in such a work placed in such a position (in the centre of a cemetery) the moral or human element has more claim to prominence than in other cases. We admit, however, that to our mind the great beauty and impressiveness of the work lies in those two central figures entering the door of the tomb—a group which both in conception and design is one of the finest and most impressive things in modern art; and those are perfectly sculpturesque in style.

The *Pall Mall Magazine* contains an article by Mr. Marillier on the life and work of Lord Kelvin, with a portrait in which he is represented holding some of those molecular models to which we recently referred in a footnote to our *résumé* of the British Association meeting.

The article is an exceedingly good and interesting account of some of Lord Kelvin's most prominent scientific inventions and what may be called his cosmical ideas and suggestions. It includes also a good anecdote; how Professor Joule came into the laboratory when Lord Kelvin was experimenting for the construction of his sounding apparatus. Joule, seeing large coils of pianoforte wire, and being told they were for sounding, asked absently "What note?" "O, the deep C," was the reply.

The *Idler* contains a short article on "What We Know About Mars," by Mr. E. S. Holden, formerly director of the Lick Observatory—a very salutary kind of article to have in a popular magazine, since it puts in a plain and comprehensible way a little of the real truth as to appearances on Mars, and the possibility (at our present telescopic distance) of drawing any positive inference from those appearances. It will be a disappointing article to the sentimentalists who think we have got so much information about "canals" in Mars and probable inhabitants of the planet, but it may tend to clear their heads a little.

In the *Revue Générale* M. Humbert concludes his spirited and thoughtful essay on "Plume et Pinceau," the comparison between the powers of verbal description and artistic representation. The interest of the article is rather in the direction of literary than of artistic criticism, but it should interest artists nevertheless.

The *Home Counties Magazine*, which has reached its third year, continues to be both a useful and interesting collection of information in regard to the history and objects of interest of the neighbourhood around London. In the present issue the "Notes on Church Plate" deals at some length with the subject of beadles' staves in the churches of the City and neighbourhood. Of the City examples a series of fifteen photographs are given, of which the most interesting in the matter of design is that of St. James, Garlickhythe, the head formed by an open ring which encircles the scallop shell of St. James, and is surmounted by a small figure of the saint. Among the other illustrations are a reproduction of an old woodcut of Pope's house at Binfield, and a view of the old Market Place, Brentford, which serves to explain the ill-odour in which Brentford was held in ancient times, as "a town of mud"; it certainly looks a pigstye of a place in the illustration.

We have received also the *Gentleman's Magazine*, *Knowledge*, and *Climate*.

LIVERPOOL ARCHITECTURAL SOCIETY:

THE CATHEDRAL SCHEME.

At the opening meeting of the session of the Liverpool Architectural Society on Monday last, the President, Professor Simpson, devoted the principal portion of his opening address to a criticism of the scheme for the proposed new cathedral for Liverpool. He commenced by referring to the decision of the Liverpool Cathedral Committee that the style of the new cathedral should be Gothic, and after tracing the history of the Gothic revival in England, he remarked that in the large workshops there was no longer the enthusiasm for Gothic work which prevailed twenty years ago, and which made the Gothic revival more real than many supposed. Of the men whose genius carried the revival to its height few survived, and to these might be added some of the younger men who had remained true to their masters' traditions, but without the slightest exaggeration it might be said that the greater number of architects now practising in England were seeking development in other directions than Gothic. What was Gothic? Unfortunately mediæval detail was still regarded by some, especially by those interested in but not practising architecture, as constituting the Gothic style. But this was the wrong way of looking at it. Construction, not detail, made a style. If the committee were willing to depart from the recognised forms of ornamentation, which hitherto had been more or less obligatory, and allow the architect who designed, and the other artists who assisted a free hand in plan, ordinance, and detail, then it was possible that a building could be produced suitable to modern requirements, and yet Gothic in the true sense of the word. But if, on the other hand, by Gothic the conventional was meant; if the term was to be narrowed to mean a reminiscence of mediæval buildings; if the plan, mouldings, carvings, and accessories were such as would conform to the standard of the amateur, whether ecclesiastical or lay, who took no interest in living architecture, but who found satisfaction in examining the work of the past, then there was every danger that the finest opportunity which had occurred since the time of Sir Christopher Wren was going to be thrown away. If the term Gothic was used in its narrow sense limitations would be placed on architects which workers in no other art would tolerate for a minute. Why they should always be the sufferers he failed to understand. They were daily told that other arts were advancing while theirs was standing still. He did not believe that. The advance in architecture was as great, if not greater, than that in any other art, but restrictions such as that proposed to be inflicted rendered advance doubly difficult. If the Emperor Justinian had commanded the architect of the new Santa Sophia to construct it in the Greek or in the Norman style the world would have been the poorer by one of its finest buldings. But the Emperor had too much good sense; he allowed the architect fair play and a free hand, and that was all they asked from the Liverpool Cathedral Committee at the beginning of this new century. If there was ever to be a new departure now was surely the time. Architecture more than any other art in existence suffered from a glorious past. What should be a source of strength to them was converted into a source of weakness. Nobody admired the old Gothic buildings more than he did. There was not a cathedral in England he had not visited, and he had seen most of the best on the Continent, but that did not make him regard their style as the one most suitable for a modern cathedral.

His objection was not so much to the decision that the style was to be Gothic as to the dictation that the style was to be anything at all. The citizens of Liverpool acted otherwise seventy years ago. If Elmes had been told he had to design in the Gothic style they would not have had in St. George's Hall one of the most remarkable buildings in the world. He would be told that that building was different; that it was not ecclesiastical. No more were the Houses of Parliament, built at exactly the same time; and yet that did not prevent the committee from issuing instructions to architects that the style of the building was to be Elizabethan or Gothic. Had they advanced nothing in seventy years? Was the method observed in London in the first year of Victoria's reign to form a precedent to be followed in Liverpool in the first year of Edward VII.? There was some excuse seventy years ago. The tide of the Gothic revival was flowing strongly, and men were full of enthusiasm for the new movement, but the tide had turned now, the old enthusiasm was dead, and a new movement on totally different lines had taken its place. It was unfair to ignore this fact. Cathedrals were not built every day. Another such opportunity might not occur throughout the century, and the narrowing of the instructions to architects would cut out many men accustomed to deal with big architectural problems, but whose sympathy with Gothic was but slight, because to them the style was inappropriate to the requirements of the day, and incapable of further development beyond the point reached 300 years ago. To turn to another point. Against the style dictated there were certain local objections. Liverpool had fine architectural traditions, but they were not Gothic. Its public buildings and many of the fine blocks of city offices erected before the middle of the last century were all Classic. So were the best recent buildings in the town. A Byzantine or Romanesque cathedral would harmonise with these surroundings because both styles were founded on Classic work. The site undoubtedly lent itself more to the squarer Classic or Byzantine than to the longer, thinner Gothic. He was not, however, protesting so much against the inclusion of the Gothic, although he regarded it as unsuitable, as the exclusion of the other styles. That the style should be left open was one of the points the Architectural Society emphasised in the meeting held between the Cathedral Committee and a deputation from the Council of the Society. They intimated to the committee their disapproval of a limited competition on the ground that, outside the very few really well-known church architects, it could not be said that there were many who possessed special claims to be regarded as experts in cathedral planning and design. Many men had recently built excellent churches, but a man who built a decent church might not be capable of dealing with the much bigger problem of a cathedral. Provided the committee did not wish to appoint direct one of the well-known men as architect, the Society suggested a competition open to all English architects, and that proper assessors should be appointed. They further suggested that at least six months be allowed for the preliminary competition, and twelve months for the final. None of these suggestions had found favour; in fact, he understood the committee had decided to dispense with assessors altogether, and make their own selections from portfolios and drawings submitted. If this were true it was opposed to the method under which all important competitions were now decided. Practical considerations were ignored by the restriction as to the style of the cathedral, and the only result would be to fetter the architect and all whom he called to assist him. This was to be the first cathedral of the new century. Was it to be merely the coping-stone of the style of the last century, or was it to be the foundation of the new? Here was a chance for an epoch-making building, for a second Santa Sophia, a second Amiens Cathedral. Was this chance going to be thrown away? The committee, he was sure, were animated by the same desire as all of them to see a building worthy of the city and worthy of the opportunity. But with all deference they were going the wrong way to obtain it. It was no offence to them to say that, not being architects, they were out of touch with the architectural movement of the day. They were clinging to a departing style. In an unrestricted competition it was possible that the best style sent in might be Gothic; if so, build it; but the decision of the committee prevented any attempt being made to show what was possible on other lines. The cathedral might take a quarter of a century to build, and at the end of that time if dry-as-dust design was now chosen, and the present architectural movement continued to grow as rapidly as it had done in the last ten or twelve years, it was probable that the first cathedral of the twentieth century, when finished, would be as obsolete in style as an old East Indiaman was now.

In the course of the discussion which followed, Mr. W. E. Willink said that it would have been very much better if the Society had never been invited to give their opinion at all, for it had been ignored, but the committee were under the delusion that they were meeting their views. A very large number of architects of repute, probably four-fifths, would be excluded from competing, because if they did compete they would be working in a style with which they were not well acquainted. The non-appointment of a professional assessor would ruin the competition, and the committee would find they had acted foolishly. That the committee excluded everything except what they crudely called Gothic was a calamity. In proposing a vote of thanks to Professor Simpson for his address, Mr. Willink added that it had been delivered on a melancholy occasion, for a great opportunity had been lost. Another member observed that it ought to be publicly known that the architects of Liverpool were practically unanimous in condemning the action of the Cathedral Committee.

METROPOLITAN ASYLUMS BOARD.

The ordinary meeting of this Board was held at the Board's offices, Victoria Embankment, on Saturday, Mr. Hensley presiding.

The Works Committee, reporting with regard to Joyce Green Hospital, recommended the acceptance of the tender of Messrs. Moorwood, Sons, & Co., Limited, of Sheffield, in 1,688*l*., for fitting up the kitchen department in accordance with the plans and specifications prepared by the architects, Messrs. A. & C. Harston. The recommendation was adopted. The other tenders were:—J. & F. May, London, 1,877*l*.; Wenham & Waters, Croydon, 2,009*l*.; Benham & Sons, London, 2,067*l*.; W. Summerscales, Keighley, 2,145*l*.; Clements, Jeakes, & Co., London, 2,200*l*.; and R. & A. Main, London, 2,612*l*.

On the recommendation of the same Com-

mittee instructions were given to Messrs. Harston to proceed at once with the preparation of the land set apart for a cemetery at the Joyce Green Hospital, and with the fencing, formation of paths, and approach roads in connexion therewith.

THE LONDON COUNTY COUNCIL.

THE first meeting of the London County Council after the summer recess was held on Tuesday in the County Hall, Spring-gardens, Mr. A. M. Torrance, Chairman, presiding.

Loans.—On the recommendation of the Finance Committee it was agreed to lend Battersea Borough Council 2,745*l.* for alterations to the Town Hall; the St. Pancras Borough Council 5,500*l.* for street improvements; the Wandsworth Borough Council 500*l.* for the purchase of dust vans; the Woolwich Borough Council 3,300*l.* for the purchase of land; the Islington Borough Council 3,244*l.* for contribution to street improvement; the Paddington Borough Council 15,000*l.* for paving works; the Hampstead Borough Council 9,525*l.* for electric lighting purposes, 19,525*l.* for electric light installation and meters, and 9,620*l.* for electric light purposes; the Kensington Borough Council 19,920*l.* for wood paving works; the Shoreditch Borough Council 2,040*l.* for provision of shelter; the Stepney Borough Council 10,000*l.* for electric light purposes; the Woolwich Borough Council 600*l.* for completion of underground conveniences; the Holborn Guardians 9,000*l.* for the erection of casual wards; the St. George-in-the-East Guardians 40,000*l.* for reconstruction of workhouse and erection of nurses' home; the Wandsworth and Clapham Guardians 1,010*l.* for additions to the infirmary; and the Woolwich Guardians 23,940*l.* for purchase of land and erection of cottage homes.

The Chairman's Annual Address.—The Chairman then delivered his annual address, in the course of which he said that the whole staff at the central offices now numbered 803, and there was a crying need for new offices. More than half the staff was housed away from the chief building, and in some cases in premises which were quite unfit to be used as offices. There was great loss of power owing to lack of proper concentration of departments. The present rents amounted to 15,460*l.*, as compared with 4,950*l.* in 1889. The present position demanded change, in the interest of health and efficient working, and as the need was urgent the remedy should be speedily undertaken. The cost would be large, but the time was already overdue when the largest municipal staff in the world should carry on its work in elevating surroundings.—During the year four important improvements were completed, including that of Highgate Archway, and considerable progress was made with the twenty-five schemes in course of execution. Of those, the most important, of course, were the Holborn to Strand scheme and the Westminster improvement. Some of the improvements now being undertaken were in districts rich in historical associations. Wherever possible, buildings of historical interest were preserved, but when it was absolutely necessary to demolish them, the greatest care was taken to preserve the most interesting portions. Moreover, during the work of excavation, vigilance was exercised to secure and preserve any objects of archæological interest which might be brought to the surface, a reward being offered to the finders thereof. In this work of preserving objects of interest the Improvements Committee have had considerable assistance from the Historical Records and Buildings Committee. The total gross expenditure of the Council in respect of the county improvements already sanctioned and now in hand, or about to be undertaken, was estimated at 11,065,207*l.*, while the net expenditure, after deducting recoupment, was estimated at 5,202,642*l.* The serious question, with all that vast projected outlay, was that of ways and means, as a marked increase in the rate must have a damaging effect on the Council's future. It seemed only reasonable that those who benefited by these improvements should make substantial contribution.—One of their most valuable acquisitions was that of the Archbishop's Park, Lambeth. The work of laying out had been commenced, and would be completed at a cost of 4,800*l.* Three entrances were to be formed, and the Ecclesiastical Commissioners had granted the Council, free of cost, the use for ninety-nine years of the necessary access. In 1889 the parks and open spaces numbered forty and cost 52,000*l.* for maintenance. Now there were ninety-two, and the cost was 113,210*l.* The acreage had increased in the same period from 2,656 to 3,833.—The Highways Committee had vast schemes in progress and under consideration. It aimed at revolution; it would not rest content until every district in London was properly served with tramways. It was convinced that horse traction was doomed, that electricity must be the future power, and that the conduit system must be adopted. He would give one illustration, of a personal character, showing how the individual was served who wished to travel in London. Returning last Saturday week from the ceremony of opening the new electric generating station at Lombard-road, Battersea, the following appeared to be the quickest route—a car from the station a certain distance, another to Chelsea Bridge, a 'bus to Victoria Station, train to Mansion House, 'bus to Broad-street, train to Mildmay Park, and then car to Highbury, or seven conveyances to go about nine miles. The working-men of London were handicapped by such a monstrous want of system more severely than in any other city. Surely that state of things needed alteration.—The Building Act Committee had held thirty-six meetings. During the year under review 7,389 new buildings were examined, for which fees amounting to nearly 21,000*l.* were received, being the greatest amount in fees received in one year since 1881; 2,966 cases of dangerous structures were dealt with, and 680 summonses were issued in consequence of the failure of owners to comply with the requirements of the Council. It had been necessary to take legal proceedings in a large number of cases, either to obtain authoritative decisions or to enforce compliance with the law. The London Government Act, 1899, considerably affected the old areas of the Local Authorities, and steps are being taken to render the areas of the districts of the District Surveyors as far as possible co-terminous with the boundaries of the metropolitan boroughs. In connexion with the naming of streets, 169 subsidiary and other names were abolished, and the numbers of 4,349 houses rearranged; ninety-nine names for new streets were approved, and 104 streets were ordered to be renamed and renumbered.

The Chairman was thanked for his address.

Buildings in Victoria-street.—The Building Act Committee recommended that the Council, in the exercise of its powers under Section 22 of the London Building Act, 1894, but in no way otherwise than under such Section, do consent to the erection of one-story shops and an entrance-porch in front of No. 125, Victoria-street, Westminster, to the line shown on the plan (signed by the Chairman of the Building Act Committee, and dated July 13, 1901), submitted with the further application of Messrs. Z. King & Son on behalf of Mrs. M. Hiscox, Mr. J. T. Hiscox, and Mr. R. T. Raikes.

The recommendation was referred back for further consideration and report.

Tramways.—The Highways Committee recommended as follows:—

"That the Highways Committee be authorised to conduct the negotiations, and the arbitration (if any), with reference to the purchase by the Council from the South London Tramways Company, of the tramways, works, and undertaking authorised by the South London Tramways (Extensions) Act, 1880.

That the Highways Committee be authorised to conduct the negotiations, and the arbitration (if any), with reference to the purchase by the Council, from the Woolwich and South-East London Tramways Company, of the tramways works and undertaking authorised by the Woolwich and Plumstead Tramways Order, 1880, and the Woolwich and South-East London Tramways Order, 1881, as confirmed by the Tramways Orders Confirmation (No. 2) Act, 1880, and the Tramways Orders Confirmation (No. 1) Act, 1881, respectively."

The recommendations were agreed to.

Breaking-up Roads.—Mr. John Burns, M.P., asked the Chairman of the Committee, Mr. Benn, whether he was prepared to take steps to prevent the breaking-up of roads by all sorts of companies. He also wanted to know whether the Committee would take steps to require that all these companies should do this work at the same time so that one breaking-up would do.

Mr. Benn explained that the London County Council was unfortunately deprived of its rights over the roads by the Borough Councils Act of 1899. All his Committee could do was to make representations to the Local Authorities.

Housing.—The Housing of the Working Classes Committee reported as follows:—

"On July 30, 1901, the Council voted a sum of 8,745*l.* for the erection of the first block of dwellings to be built on the Swan-lane site, Rotherhithe, and authorised us to invite tenders for the erection of the dwellings. At the same time the Council authorised our Chairman to open the tenders when received, and to accept the lowest satisfactory tender. The following tenders were accordingly received and opened by our Chairman—

	£	Alternative price with comb-graining of internal woodwork. £
Messrs. Holloway Bros.	8,051 ...	8,122
Mr. B. E. Nightingale ...	8,222 ...	8,277
Mr. R. L. Tonge	8,280 ...	8,323
Messrs. Martin, Wells, & Co.	8,310 ...	8,424
Messrs. Spencer, Santo, & Co.	8,406 ...	8,480
Mr. H. M. Patrick.....	8,490 ...	8,574
Messrs. Herbert Bros. ...	8,773 ...	8,864
Messrs. Tod & Newman	8,913 ...	8,968
Messrs. Sabey & Son ...	9,418 ...	9,536
Messrs. D. Gibb & Co....	9,745 ...	9,821
Messrs. J. Smith & Sons, Limited	10,954 ...	11,108
Messrs. Hobbs Bros. ...	12,085 ...	12,258

The architect's estimate for the dwellings (including comb-graining of internal woodwork) amounted to 8,145*l.* Acting, therefore, on the authority referred to above, our Chairman accepted the tender of Messrs. Holloway Bros. of 8,122*l.* The contract was sealed on September 11, 1901, and the work is now in hand.

The following tenders were received and opened by the Council on July 30, 1901, for the construction of the first part of the roads and sewers on Section A of the Totterdown-fields estate:—

	£	s.	d.
Mr. F. J. Coxhead	7,369	0	0
Mr. George Wilson	7,525	11	7
Messrs. C. W. Killingback & Co.	7,791	5	4
Messrs. Lawrence & Thacker ...	7,932	15	9
Mr. Samuel Redhouse	8,118	0	0
Messrs. John Mowlem & Co.	8,658	14	7
Mr. Stephen Kavanagh	8,749	5	7
Messrs. William Neave & Son ...	9,722	11	7
Messrs. E. Rogers & Co.	9,800	19	4
Messrs. Meston & Hale	12,945	19	1
Mr. James Dickson	13,763	6	4

On July 30, 1901, the Council sanctioned an expenditure of 7,725*l.* to cover the cost of the work, and of this sum 7,275*l.* represented the amount which could be spent on the contract itself. On the same date the Council authorised our Chairman to accept the lowest satisfactory tender within the amount sanctioned. The lowest tender received exceeded this amount by 94*l.*, and, acting on the authority referred to above, our Chairman reduced the amount of the provisional sum of 500*l.* for contingencies included in the tender of Mr. Coxhead by 100*l.*, and thus brought it within the limit imposed by the Council. The result of inquiries as to Mr. Coxhead's position and competence to carry out the work having proved satisfactory, our Chairman then accepted his tender for the revised amount of 7,269*l.* The work was at once put in hand, and is now well on the way to completion."

The Council, having transacted other business, adjourned.

ENGINEERING SOCIETIES.

SOCIETY OF ENGINEERS.—At a meeting held at the Royal United Service Institution on Monday evening, the 7th inst., Mr. Charles Mason, President, in the chair, a paper was read on "Preliminary Investigations for Water Supply," by Mr. Sydney A. Hollis. The author first pointed out the difficulties which were encountered by engineers in tropical and sub-tropical countries in the gaugings of rainfall and rivers. Some statistics of remarkable and erratic rainfalls in the Cape Peninsula were given. The author then gave a detailed account of the gaugings carried out by him at Steenbrass River, Cape Colony. He stated that the gaugings were taken with a view to the ultimate formation of a large storage reservoir by means of a dam across the mouth of the valley, the object being to obtain a supply of water for some of the suburbs of Cape Town. A large gauge weir was erected measuring 60 ft. across, and it was found that the flow of water in the river fluctuated between half a million gallons and 300 million gallons in the twenty-four hours. A description was given of the river gauges constructed to measure the flow of water in winter and summer, with particulars of the number and position of the rain and evapora-

tion gauges. A paper was also read on "Irrigation Works in South Africa," by Mr. J. Freebairn Stow. The author first referred to the Report of the Royal Commission on the settlement of time-expired soldiers and others in South Africa on the conclusion of the war, and pointed out that the Commissioners were strongly impressed with the value of irrigation works being undertaken in order to convert the vast area of dry veldt into an agricultural site, capable of providing produce for intending settlers. The author then drew attention to the persistent attempts made in 1886 by the late Mr. H. S. Orpen, at that time Surveyor-General of Griqualand West, to induce the Government of the day to take up the subject of irrigation works. The author then described the first scheme of irrigation ever attempted in South Africa on a large scale, and referred to the failure which attended the project. He then gave an account of the scheme prepared by Mr. Litchfield for irrigating the veldt in the vicinity of Douglas, and described the ingenious and somewhat rough-and-ready means adopted for the construction of the masonry dam across the Vaal River, and the engineering difficulties encountered. The use of explosives in the blasting operations, necessitated by heavy rock cuttings, and the methods adopted for crossing the valleys and running the canal round the kopjes, were described, and the difficulty of ensuring a safe passage across or under the irrigation canal for storm-water from off the numerous kopjes was also discussed. The manner in which the last sections of the masonry dam were built in was described, and the author gave examples of the way in which engineering work in a rough country was carried on, and how plant and material were transported where railways were unknown. In conclusion, he referred to the favourable attitude of the Government of Cape Colony in respect of irrigation works.

Illustrations.

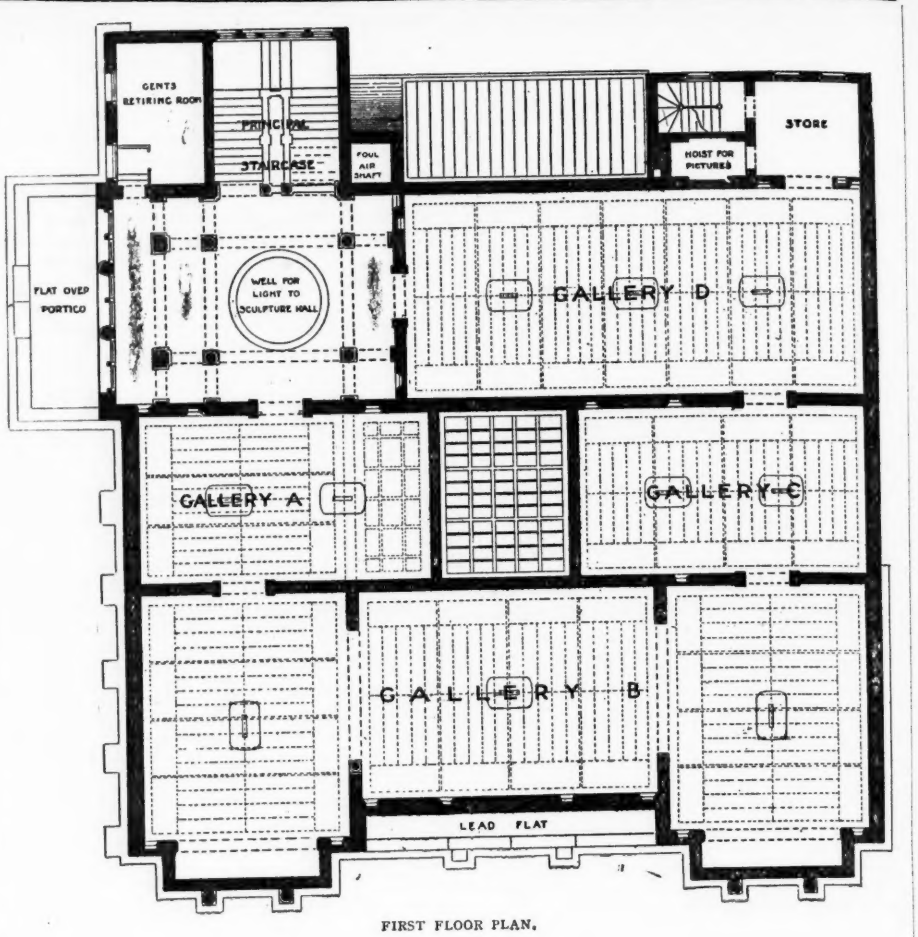
BURY ART GALLERY AND PUBLIC LIBRARY.

THIS building is situated at the corner of Moss-lane and Silver-street, and has a frontage to Moss-lane of 110 ft. and to Silver-street of 105 ft.

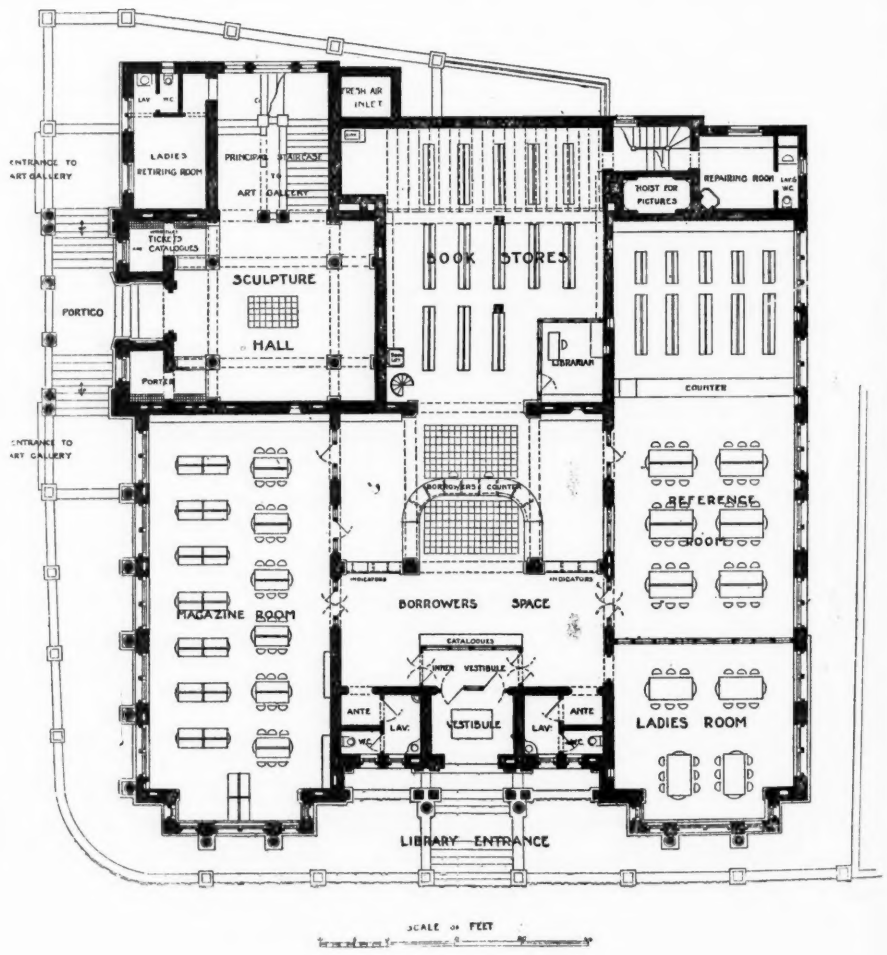
The structure comprises three complete stories—basement, ground, and first floors—with a sub-basement under the rear for the heating and ventilating plant. The first floor is entirely devoted to art, and is entered from a sculpture hall on the ground floor by a spacious stone staircase. There are five galleries arranged in sequence, the sizes varying from 27 ft. by 33 ft. to 27 ft. by 61 ft. Provision is made for ladies' and gentlemen's cloak-rooms, lavatories, &c., and at the back of the building there are rooms for repairing, &c. A large hoist connects the loading way with all the floors.

The ground floor has been devoted to library purposes, and will be entered by a vestibule 12 ft. wide. This vestibule opens direct into the borrowers' space, which is 40 ft. wide. To the right of the borrowers' space swing doors open into the ladies' and reference rooms, and to the left admission to the magazine and reading-rooms is gained in a similar manner. Separate conveniences are provided on each side of the entrance, and are entered from the borrowers' space through ante-rooms. A librarian's room and a large book store are arranged in conjunction with the borrowers' space. The basement is chiefly devoted to stores under the library, and connected therewith by a spiral staircase is a large book store. At the rear of the building a loading way for receiving books, pictures, &c., hoist, and packing-room are provided on this floor. The remainder is occupied by store-rooms for packing-cases, &c.

The main elevations are faced with boasted ashlar obtained from the Higher Stancliffe Quarries, Darley Dale, Derbyshire, the remaining elevations being faced with Edwards' Ruabon best selected red bricks. The joiner's work generally is Kauri pine stained. The gallery floors are laid with oak parquetry, the library with oak blocks, and the reading-rooms with pitch-pine blocks. The vestibules and halls have mosaic floors, and the steps, landings, &c., for the staircases are blue Shepley with Bath stone balusters and handrail.



FIRST FLOOR PLAN.

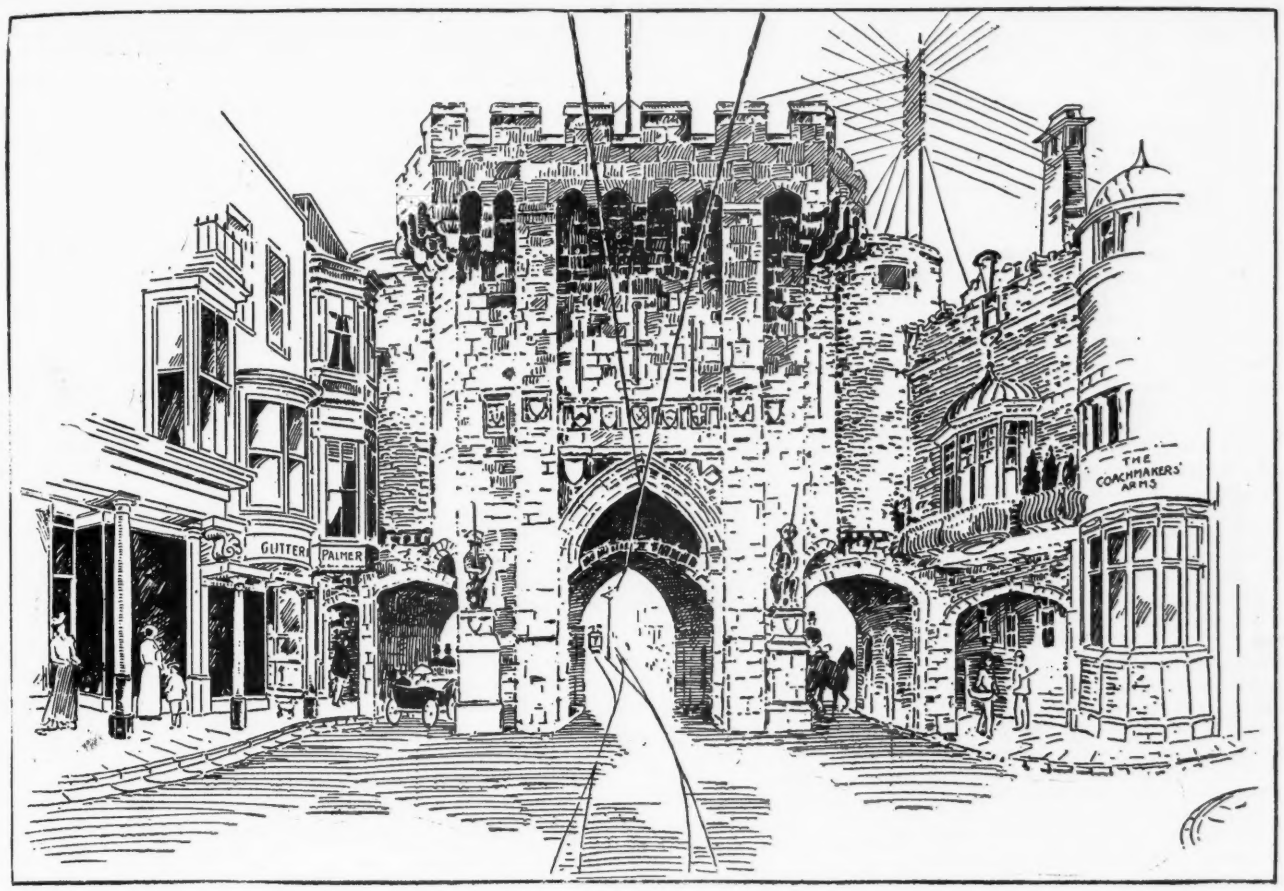


GROUND PLAN.

Bury Municipal Art Gallery. Plans.

The building is heated and ventilated on the "Plenum" system, is of fireproof construction throughout, and is lighted by electricity. Messrs. Thompson & Brierley, of Bury, have carried out the general contract, their tender being 21,259*l*. The clerk of works was Mr. G. E. Smirk, of Bury.

The following special tradesmen have also been employed on the work:—Messrs. Sutcliffe & Co., Manchester—heating and ventilating; The Banks Fireproof Construction Syndicate, London—fireproof construction; Mr. J. F. Ebner, London—art gallery floors; Messrs. C. W. Williams & Co., Manchester—mosaic; Mr. J. J. Millson, Manchester—carving and sculpture work; Messrs. W. J. Pearce & Co., Manchester—leaded lights; Messrs. Heywood & Co., Huddersfield—patent glazing; Messrs. Marley Bros., Birmingham—fire extinguishing apparatus; Messrs. Hardman,



The Bar-Gate, Southampton, as it would appear after the Alterations proposed in Mr. Lucas's Scheme.

Powell, & Co., Birmingham—wrought-iron gates; Mr. Burgoine, Bury—hoist; Mr. George Wragge, Salford—protection rails, brackets, &c.; and Messrs. Singer & Co., Frome—electric light fittings.

The furniture and fittings have been executed in Dantzic oak by Messrs. Goodall, Lamb, & Heighway, Manchester, and the building has been painted and decorated by Mr. George Smith, of Bury.

The whole of the work, including the fittings, has been designed and supervised by the architects, Messrs. Woodhouse & Wilioughby, of Manchester.

HOUSE, ASCOT HEATH.

This house, which is being erected on the north side of the heath, is constructed of two kinds of local brick, the quoins, &c., being red and the filling-in of a "grey" colour, and the roof is covered with tiles. Mr. Wm. Watson, of Ascot, is the builder, his contract being about 3,000*l*., and the architect is Mr. Leonard Stokes, of Westminster.

SCHEME FOR DEALING WITH THE BAR-GATE, SOUTHAMPTON.

As many of our readers will probably have heard, there has been a foolish agitation going on at Southampton in favour of doing away with the old Bar-Gate, one of the most interesting ancient monuments in Southampton, on the usual plea of public improvement. A Southampton architect, Mr. Lucas, has drawn up the scheme illustrated in our plate (from a drawing exhibited at the last Royal Academy) for altering the roadways so that the obstruction to traffic may be removed without injuring the structure.

Mr. Lucas's aim is to preserve permanently the original function of the building as the town's chief gateway, while, nevertheless, increasing the traffic facilities of the street. It is proposed to do this by widening the two side passages for the use of carriage traffic, and by forming two new passages for pedestrians under the adjoining business premises. The side passages, made towards the end of the eighteenth century, have no historical value whatever, and the enlargement of their southern entrances would be a distinct gain to that face of the Bar-Gate, as, by being the same height and only about two-thirds the width, they clash with the central opening, making it appear stunted while they look stilted. Their arches, too, are of a different type to the older one, and they are awkwardly out of centre with the windows over.

The alteration on the north side is so slight that many people have with good excuse taken the sketch which we print in the text to represent the gate as they know it. We understand that if other considerations readily permitted, Mr. Lucas would have preferred to design the northern entrances of the carriage-ways somewhat farther to the east and west so as to clear the two turrets and allow of building up under them from the ground. It is doubtful, however, whether the arrangement shown is not more picturesque though less constructional; and it is certain that the curving of the passages would be a great inconvenience.

The scheme only involves one complete rebuilding, that of the public-house at the north-west corner, the other premises affected having their lower stories set back and the upper ones carried on columns. The covered walks thus formed would be a boon to those who have shopping to do in wet weather. These walks are on the plans called "piazzas," for want, possibly, of an English name that would be as suitable and concise. A piazza, however, is not necessarily a covered place; but there are also objections to the words "colonnade" and "penthouse."

The plan shows the extreme narrowness of the street independent of the Bar-Gate, so that even from a wholly utilitarian point of view its removal would be absurd. Mr. Lucas's plan trebles the effective width of the road, and divides the wheeled traffic into two streams, one going up and one down. It increases also the wayleave for pedestrians, and provides better access to the large hall over the gateway, now used as the Guildhall, by a new doorway and a partly new flight of steps at the east end, and by an entirely new staircase at the west.

"PRIX DE ROME" DESIGNS.

We give on one plate reproductions of the works in architecture, painting, and sculpture which gained the "Prix de Rome" at the last competition for it at the Ecole des Beaux-Arts, Paris.

The subject for the prize in architecture, gained by M. Jean Hulot, was "An Establishment for Artistic, Literary, and Scientific Studies, founded at Paris by the United States of America." Except in the presence of the eagle as an acroterion to the dome, there is nothing specially to connect the design with the United States, unless we take the view that as American architects have closely imitated French methods, the more French, and the more "Ecole des Beaux-Arts," the design appears, the more American it is. The smaller elevation is apparently intended to show the proposed site and grouping.

The subject for the prize in painting, gained by M. Jacques Defrance, is "Christ Healing the Sick at Evening before the Gate of a Town."

The subject for the sculpture prize, awarded to M. Bouchard, is "Œdipus and his daughter Antigone driven from Thebes.'

The winning of the Prix de Rome, as our readers are probably aware, entitles the young artist to four years' sojourn and study in Rome, at the expense of the State.

THE TRIBUNAL OF APPEAL:

THE LAYING OUT OF NEW STREETS.

The Tribunal of Appeal under the London Building Act, 1894, met at the Surveyors' Institution, Great George-street, Westminster, on 27th ult., to hear an appeal by Mr. Walter H. Dawson as agent for and on behalf of Mr. Henry W. Forster, M.P., against the order of the London County Council refusing to sanction the formation or laying out of new streets for carriage traffic on part of the Forster Estate, on the east side of Bromley-road, Catford, at the corner of Sangley-lane. The members of the Tribunal present were Messrs. J. W. Penfold (chairman), A. H. Hudson, and E. A. Gruning.

The appellant's case was conducted by Mr. Guy Lushington, barrister; while Mr. J. W. Andrews, from the Solicitor's department of the London County Council, appeared in opposition to the appeal.

Mr. Lushington said the appeal was brought under Sections 9 and 19 of the Act, the Council having refused to pass plans for the creation of new streets on an estate which was now in process of development. Their ground for this refusal was set down as due to the proposed road not communicating conveniently with existing streets. The Council had the right to use their discretion in this matter, subject, of course, to an appeal to that Tribunal; hence, he had all the more confidence in ap-

pearing before them. The real reason of the Council's refusal was, he contended, due to the fact that the four projected streets did not, according to the view of the County Council, communicate with the streets of the adjoining estate, which was being developed by Mr. Cameron Corbett, M.P. The Tribunal had, he submitted, to be guided by the law, and not by the opinion of a man or a body of men. As a matter of fact, the streets proposed to be laid out by the appellant would communicate with two existing streets, and he argued that it was not the duty of the public authority to cast its eyes around an increasing neighbourhood to see whether the plans would suit the circumstances of an adjoining estate not developed. The law, on the contrary, provided only that proposed new streets should communicate in a reasonable manner with other streets already in existence, and not with adjoining estates. The Lewisham Borough Council had signified that it considered the scheme unobjectionable.

Mr. Dawson, agent to the appellant, gave evidence in support of the appeal.

Mr. Andrews, for the respondents, mentioned that there was already before the Council an application in connexion with the roads of the adjoining Corbett Estate, and in the course it had taken the Council was acting bonâ-fide in the interest of the public. Indeed, it was the intention of Parliament to cast upon the Council the responsibility of watching the interests not of individual owners, but of the public as a whole, and to insist that a man should not lay out his estate without regard to the public convenience. In this case it was the opinion of the advisers of the Council that the proposed roads did not offer ready means of access into Bromley-road, and that, having regard to the certainty that roads would shortly be constructed on the adjoining Corbett Estate, the proposed streets should be planned in such a manner that they would readily communicate with the others. His contention was that there should be a well-considered scheme, designed in the public interest, for the development of the estate, having regard to the development which was to proceed on the adjoining estate. In this connexion he mentioned the possibility of an appeal coming before the Tribunal from the owner of the adjoining estate, and he suggested an adjournment of the present appeal until that had been dealt with.

The only witness called for the respondents was an assistant in the Superintendent Architect's department of the London County Council. He pointed out that the chief road sketched in the appellant's plans was not direct, and that if the application were sanctioned there could be no direct means of access between the Forster and the Corbett Estates. This would be very inconvenient for future residents, particularly in regard to access to the two nearest stations—Hither Green and Bellingham.

Mr. Andrews contended that this alone was a great consideration.

Mr. Hudson : But the Council has no right to put on the screw at the expense of an individual owner.

Mr. Andrews : The Council considers the claims of rich and poor alike ; it represents London as a whole.

The Chairman said the Tribunal was unanimously of opinion that the appeal should be allowed, but they added a stipulation that the proposed roads should be constructed within three years.

Some discussion ensued on the question of costs.

Mr. Andrews contended that it would be scarcely just to condemn the Council for a decision arrived at bonâ-fide as a part of its duty to the public.

Mr. Lushington argued that a principle was involved, and that the appellant was entitled to be reimbursed the costs to which he had been put in upholding it.

Negotiations between Mr. Lushington and Mr. Andrews with a view to an agreed sum having proved abortive, the Tribunal certified for 25*l.* costs.

Reredos, St. Michael's Church, Edinburgh. —A reredos has recently been erected in the Lady Chapel of St. Michael's Church, Hill-square, Edinburgh. When complete the niches will contain groups of figures. The carving was carried out from designs by Mr. Hamilton More Nisbett, architect, by Mr. John Gibson, Haymarket ; and the painting and colour decoration were done by Messrs. G. & H. Potts, Edinburgh. The cost of the erection was 145*l.*

APPLICATIONS UNDER THE 1894 BUILDING ACT.

At the meeting of the London County Council on Tuesday the following applications under the 1894 Building Act were considered. Those applications to which consent has been given are granted on certain conditions. Names of applicants are given in brackets. Buildings are new erections unless otherwise stated :—

Means of Escape in Case of Fire.

Holborn.—Means of escape in case of fire proposed to be provided on the fifth and sixth floors of the Kingsley Hotel, Hart-street, Bloomsbury (the upper surfaces of which floors are above 60 ft. from the street level) for the persons dwelling or employed therein (Mr. C. F. Doll for Mr. J. Truslove).—Consent.

Lines of Frontage and Projections.

Wandsworth.†—Five shops, with a screen wall and storerooms over, on the south side of Lower Richmond-road, Putney, westward of Martyn's Waterman's School (Mr. F. A. Powell for Mr. A. C. Ballard).—Consent.

Bethnal Green, North-East.†—One-story shops on the forecourts of Nos. 32 and 34, Teesdale-street, Hackney-road, Bethnal Green (Mr. C. A. Legg for Mr. J. Mendes).—Consent.

Brixton.†—A building, to be used as a furniture depository, on the south side of Brighton-terrace, Brixton-road, Brixton, on the site of Musley House (Mr. J. W. Chapman for the Bon Marché, Limited).—Consent.

Hackney, North.—Houses, with bay windows, on the east side of Mount Pleasant-lane, Upper Clapton, between Baker's-hill and No. 121, Mount Pleasant-lane (Mr. G. R. Woodruff).—Consent.

Hackney, South.†—A two-story building on the east side of Durrington-road, Clapton, to abut upon Ashenden-road (Mr. H. M. Wakley for Mr. R. H. Barnes).—Consent.

Hammersmith.†—Two projecting buttresses and two projecting doorways at the People's Hall, on the west side of Latimer-road, Hammersmith, northward of Olaf-street (Messrs. Fleetwood, Son, & Eversden for Mr. W. H. Winterbotham).—Consent.

Greenwich.†—One-story shops in front of thirteen proposed houses on the north side of Woolwich-road, Greenwich, between Nos. 461 and 491 (Mr. T. N. Dinwiddy for Mr. T. Dinwiddy).—Consent.

Kensington, South.†—That the application of Mr. W. G. Hunt for an extension of the period within which the erection of buildings on the east side of Addison-road, Kensington, at the corner of Oakwood-court, was required to be completed, be granted.—Agreed.

Lewisham.†—That the application of Mr. J. W. Brooker for an extension of the period within which the erection of six houses on the east side of Brockley Rise, Lewisham, at the corner of Brockley Park, was required to be commenced, be granted.—Agreed.

Lewisham.†—A wood, iron, and slate porch at the entrance to No. 59, Longton-grove, Sydenham (Mr. J. M. Stewart for Messrs. Stone, Simpson, & Mason).—Consent.

Lewisham.†—Retention of two, and the erection of eleven, dwelling-houses on the south side of Brownhill-road, Catford (Mr. H. G. Rodda for Mr. Durrant).—Consent.

Marylebone, West.†—Porch on the north side of No. 33, Montagu-square, St. Marylebone, to abut upon Montagu-place (Mr. F. W. Foster).—Consent.

Peckham.†—One-story shops on part of the forecourts of Nos. 136, 138, and 140, Kimberley-road, Nunhead (Mr. J. W. Watkin).—Consent.

Wandsworth.†—A two-story addition in front of No. 35, Jew's-row, Wandsworth (Mr. A. E. Nightingale for Mr. F. H. Bartle).—Consent.

Woolwich.—An open wooden porch in front of No. 32, West Chislehurst Park, Eltham (Mr. G. Hubbard).—Consent.

Woolwich.—One-story shops on part of the forecourts of Nos. 43, 44, and 45, Plumstead-road, Woolwich (Messrs. Church, Quick, & Whincop for Mr. P. J. Gibbons, Mr. H. A. Back, Mr. W. A. Peckett, and Mr. B. H. de Bartodano).—Consent.

Holborn.†—An iron and glass enclosure over the sunk area in front of No. 27, Red Lion-square, Holborn (Messrs. Lander, Bedells, & Crompton for Mr. E. Marshall).—Refused.

Marylebone, East.—Buildings on the west side of Albert-road, Regent's Park, at the corner of High-street, on the site of Portland-terrace (Mr. F. J. Stevenson for Lord Howard de Walden).—Refused.

Westminster.—Three three-story bay windows and two porches to two blocks of residential flats, proposed to be erected on the south-west side of Emery Hill-street, Westminster, northward of Coburg-row (Mr. E. J. Stubbs for Messrs. J. Allen & Sons, Limited).—Refused.

St. George, Hanover-square.—A warehouse building on the site of Nos. 199 to 203, Buckingham Palace-road, Pimlico (Mr. W. A. Large for Messrs. Humphreys, Limited).—Refused.

St. George-in-the-East.—The rentention of a wooden bay window or shopfront in front of No. 342, Commercial-road, St. George-in-the-East (Dr. W. J. Harding).—Refused.

St. Pancras, East.—Buildings on the site of Nos. 152 to 170, Euston-road, St. Pancras (Mr. M. C Meaby for the Hearts of Oak Benefit Society).—Refused.

Strand.—A projecting wood and iron sign in front of No. 38, Old Compton-street, Soho (Mr. H. Frith).—Refused.

Strand.—The retention of a projecting illuminated sign in front of the Lyric Theatre, Shaftesbury-avenue, St. James's (Mr. J. G. Buckle for Mr. T. B. Davis).—Refused.

Wandsworth.—An estate office on the south side of Replingham-road, Southfields, at the corner of Wimbledon Park-road (Mr. D. Matthews).—Refused.

Woolwich.—The re-building to an increased height of the back additions of No. 2, High-street, Plumstead, to abut upon Griffin-road (Mr. C. Kitley for Mr. A. Chapman).—Refused.

Width of Way.

Westminster.—Two one-story office buildings on the east side of Palmer-street, York-street, Westminster, northward of the Metropolitan District Railway, with the external walls of such buildings at less than the prescribed distance from the centre of Palmer-street (Messrs. Barlow & Roberts).—Consent.

Fulham.—A one-story building to be used as a billiard-room at the rear of the Three Kings public-house, North End-road, Fulham, with the external walls of such building at less than the prescribed distance from the centre of Conan-street (Messrs. Richardson & White for Mr. R. Wash).—Consent.

Kennington.—A building to be used as a staircase, at Cumberland Works, Wigton-place, Milverton-street, Kennington, with the external walls of such buildings at less than the prescribed distance from the centre of Wigton-place (Mr. A. Parnacott for Messrs. T. & W. Judge).—Consent.

Hammersmith.—A block of flats on the west side of Queen-street, Hammersmith, at the corner of Sussex-place (Mr. H. G. Brace for Mr. E. Messiter).—Refused.

Width of Way and Lines of Frontage.

Finsbury, Central.—An iron and glass porch at the entrance to St. Philip's Vicarage, Holford-square, Pentonville (the Rev. T. C. Elsdon).—Consent.

Hackney, North.†—A block of dwellings on the north side of Stamford-terrace, Stamford Hill, Hackney (Mr. C. G. Smith for Messrs. Michell, Goodman, Young, & Co., Limited).—Consent.

Lewisham.—Five houses, with bay-windows, on the south-east side of Dartmouth-road, Forest Hill (Mr. R. C. Murray for Mr. W. A. Owston)—Refused.

Lines of Frontage and Space at Rear.

Strand.—Certain deviations from the plan certified by the District Surveyor, under Section 43 of the Act, so far as relates to the proposed rebuilding of No. 55, St. James's-street, Piccadilly, at the corner of Bennett-street (Messrs. Newman & Newman for the American Dental Institute).—Refused.

Wandsworth.—A dwelling-house on the south side of Ormerley-road, Balham, to abut upon Laitwood-road (Mr. W. E. Johnson for Mr. G. E. Treves).—Refused.

Lines of Frontage and Construction.

Lewisham.†—The retention of a wood and glass showcase on the forecourt of No. 31, Brownhill-road, Catford (Messrs. A. T. and E. J. Bateman).—Refused.

Deptford.—Two houses at the rear of 45, 47, and 49, Kender-street, New Cross, and the rebuilding of two houses on the east side of Kender-street, southward of No. 49, with the external walls of the houses at less than the prescribed distance from the centre of a passage-way leading to Esther-cottages (Mr. J. H. Waterworth for Mr. W. Falkner).—Refused.

Westminster (detached).—A building, to be used as a church, on the north side of Prince Consort-road, South Kensington, with the external walls of such building at less than the prescribed distance from the centre of Jays-mews (Mr. G. F. Bodley for the Rev. H. B. Coward).—Refused.

Space at Rear.

Hackney, South.—Two-story workshop building at the rear of George House, Gainsborough-road, Hackney Wick, with an irregular open space at the rear (Mr. H. Gaye for Miss G. M. Bevan).—Consent.

Holborn.—A block of residential flats on the site of Nos. 47, 48, and 49, Hunter-street, and No. 9, Handel-street, Brunswick-square, St. Pancras (Mr. J. Davis for Messrs. Brown Brothers).—Refused.

Formation of Streets.

Lewisham.—That an order be issued to Mr. G. F. Logsdail refusing to sanction the formation or laying out of new streets for carriage traffic on the St. German's estate, Hither Green, to lead out of Torridon-road and Killearn-road (for Mr. A. Cameron Corbett, M.P.).—Agreed.

Wandsworth.—That an order be issued to Mr. J. M. Jones refusing to sanction the formation or laying out of a new street for carriage traffic to lead out of the east side of Wimbledon Park-road, Wandsworth, northward of Replingham-road (for the Lands Development Syndicate).—Agreed.

Buildings for the Supply of Electricity.

Bermondsey.—A deviation from the plans approved for the erection of a generating station and works on the west side of Neckinger, Spa-road, Bermondsey, so far as relates to an alteration in the height of the battery-room and the erection of an additional story on the one-story men's room and lavatory to the southward of the battery-room (Messrs. Kincaid, Waller, & Manville, for the Council of the Metropolitan Borough of Bermondsey).—Consent.

Height of Buildings.

Islington, West.—That the application of Mr. F. Matcham for an extension of the periods within which the erection of a theatre building on the south side of Holloway-road, Islington, to exceed in height the width of a proposed new street to lead from Holloway-road to Warlters-road was required to be commenced and completed, be granted.—Agreed.

Dwelling-houses on Low-lying Land.

Woolwich.—That the solicitor do prepare a licence under Section 122 of the London Building Act, 1894, to Messrs. J. & C. E. Pearson, for the erection of a public-house with a cellar beneath, on low-lying land at the corner of Bostall-lane and Abbey-wood-road (Mr. J. O. Cook).—Agreed.

The recommendations marked † are contrary to the views of the Local Authorities.

GIGGLESWICK SCHOOL CHAPEL.

THE new chapel at Giggleswick School in Yorkshire, built from the designs of Mr. T. G. Jackson, R.A., the exterior of which was illustrated in our issue of September 10, 1898, was opened last week, when there was a large gathering of visitors to a special service and a lunch afterwards, followed by an organ recital in the chapel in the afternoon.

The chapel stands in an isolated position on the crown of a hill, and by the wish of the donor, Mr. Morrison, the principal feature in it was to be a dome, though the architect has partially assimilated this feature to the Gothic style of the remainder of the building, by designing the dome as an octagon on plan, which of course removes it from the category of domes in a constructional sense, though the architectural impression, in a distant view at all events, is retained.

We take the following information in regard to the building from the illustrated booklet which was issued in connexion with the occasion. The walls of the chapel are fitted into the naked rock which comes to the surface of the hill, the inclined planes of the stratification forming fine lines in the configuration of the site. Advantage has been taken of these in placing the chapel and forming the approaches, so that the natural and artificial lines should compose harmoniously and help one another.

It was the wish of the donor that the building should be finished and furnished in every respect from the beginning, leaving no room for subsequent intrusion of possibly unsympathetic work; and thus the chapel affords a rare instance of a building in which every detail, not only of construction but of decoration and furniture, has been completed at once, and designed by the same hand or under the same direction.

The dome is constructed on a novel method, with interlocking blocks of terra-cotta, invented and made by Mr. Pulham, with a backing of concrete. With these blocks and some additional contrivance it was found possible to build the dome without centering.

The outside of the dome is of timber covered with copper; the four main roofs are laid with cast lead; and the aisles and antechapel are covered with green Elterwater slates.

The walls are of millstone grit, quarried on the spot, faced externally with yellow Idle sandstone up to the plinth, and above it with Mr. H. R. Simpson's red Lazonby stone, intermixed with bands and chequers of sandstone and black limestone from Mr. Delany's quarry at Horton. The wrought masonry outside, including the window traceries, is of Messrs. Obank's Lees-moor sandstone. The interior dressings are of Ancaster Oolite, from Messrs. Lindley's quarries, banded with red Egremont sandstone, supplied by Mr. James Smith. The mortar in the foundations is made with Portland cement, and above with Messrs. Nelson's selenitic lime, which is also used for the plastering.

Advantage is taken of the fall of the ground to form a vestry under the east end, which communicates with the chapel above by a stair in one of the turrets.

The dome and four pendentives are lined with glass mosaic on an arrangement and scheme of colour devised by the architect, the cartoons being drawn by Mr. George Murray, a student and medallist of the Royal Academy, and executed by Messrs. Powell, of Whitefriars. Their foreman, Mr. Gregory, and the workmen under him, had previously carried out the mosaic decoration from Sir W. B. Richmond's designs at St. Paul's Cathedral. A semi-dome model showing the design was exhibited in the architectural room at the last Royal Academy, when we drew attention to it. We presume the archaic character of the design satisfies the architect and the donor; we should have preferred to see something a little more modern in spirit as the decoration of a chapel for a modern school. The mosaic, like that of St. Paul's, was worked from the face and *in situ*. Round the base of the dome in letters of mosaic is the text:—

MEMENTO CREATORIS TVI IN DIEBVS IVVENTVTIS TVAE ANTEQVAM VENIAT TEMPVS AFFLICTIONIS.

The scheme of decoration is continued beyond the limits of the mosaic by "sgraffito" in the four vaults which support the drum of the dome, and in the nave ceiling. In each of these vaults the design consists of a circle in the crown of the arch bearing a sacred monogram, and scrolls of vines and grapes, with labels regularly spaced and bearing the following texts:—

In the eastern arch—

EGO SVM RESVRRECTIO ET VITA QVI CREDIT IN ME ETIAM SI MORTVVS FVERIT VIVET

ET OMNIS QVI VIVIT ET CREDIT IN ME NON MORIETVR IN AETERNVM

In the southern arch—

EGO SVM VIA ET VERITAS ET VITA NEMO VENIT AD PATREM NISI PER ME

I ☧ I S

NON RELINQVAM VOS ORPHANOS VENIAM AD VOS QVIA EGO VIVO ET VOS VIVETIS

In the western arch—

EGO SVM VITIS VERA ET PATER MEVS AGRICOLA EST MANETE IN ME ET EGO IN VOBIS

I ☧ I S

EGO SVM VITIS VOS PALMITES QVI MANET IN ME ET EGO IN EO HIC FERT MVLTVM FRVCTVM.

In the northern arch (over the organ)—

BENEDIC ANIMA MEA DOMINO ET OMNIA QVAE INTRA ME SVNT NOMINI SANCTO EIVS

A Ω

IVBILATE DEO OMNIS TERRA SERVITE DOMINO IN LAETITIA

Sgraffito is also employed on the walls of the antechapel in a diaper pattern, with this text over the entrance to the nave—

INTROITE PORTAS EIVS IN CONFESSIONE ATRIA EIVS IN HYMNIS

The sgraffito was cut and worked by two young Oxonians, pupils of the architect, Mr. William H. Nicholls, of Hertford College, and Mr. Douglas Stewart, of Oriel.

The great window of the south transept refers to Giggleswick School and its benefactors and *alumni*. In the middle light is Edward VI. copied from an illumination in the charter given by him to the school, and below him is the figure of James Carr of Stackhouse, who founded the school in 1512, holding a model of the first building in his hand. In the other lights are Mr. Walter Morrison, holding a model of the new chapel of which he is the donor, Archdeacon Shute, Archdeacon Paley who was a boy here, and the Rev. George Style, the present head master. The figures in the window were drawn by Sir James Linton.

The six clearstory windows bear figures of Christian worthies of various ages, kinds, and denominations, also were designed by Sir James Linton.

North Side.	*South Side.*
1. Martyrs:	4. Warriors:
Sir Thomas More.	Sir Philip Sidney.
King Edmund.	King Alfred.
Bishop Latimer.	General Gordon.
2. Divines:	5. Missionaries:
Bunyan.	Henry Martyn.
Wycliffe.	Columba.
Wesley.	Livingstone.
3. Teachers:	6. Poets:
Alcuin.	Milton.
Wykeham.	Cædmon.
Arnold.	Tennyson.

Below them a band of sgraffito round the nave bears texts from the chapter commonly read in colleges on their Founder's day.

In niches over the west door inside the chapel are two figures in bronze by Mr. George Frampton, A.R.A., representing King Edward VI., who gave the school its charter, and Queen Victoria, whose "Diamond Jubilee" the chapel was built to commemorate.

The whole of the furniture is of cedar, imported by Mr. Morrison direct from the province of Tucuman in the Argentine Republic.

The boys' seats occupy the nave right and left of a wide central passage, and at the west end are eight stalls under canopies for the head-master and others. These western stalls have carved and pierced standards to the canopies, containing figures of the Four Evangelists writing their Gospels, and attended by their emblems. The figures were modelled by Mr. Carter, and are treated in a broad, simple manner suitable to the material. In the canopies above are pendants modelled by Mr. Carter, with six figures of prophets—Moses, Elias, Esaias, Jeremias, Ezekiel, Daniel.

The foliage of the capitals of the nave arcades is taken from plants common in the locality; a method which adds a certain local interest to the carving, but which, as in the case of the Oxford Museum, is rather apt to lead to too much realism in architectural detail.

The whole of the carving in wood and stone was undertaken by Messrs. Farmer & Brindley. The lectern is of bronze, and was made from the architect's designs by Messrs. Hart, Peard, & Co., of Drury-lane, London.

The pavement is of black and white marble, with steps of black and a panel of coloured marbles under the dome. In the mosaic borders the following marbles are used: *verd'antico* from the ancient quarry of Casambala in Thessaly, and porphyry-coloured *rosso* from Scutari in Laconia, Peloponnesus. The central disc is of red Pavonazzetto breccia marble from the Isle of Scyros in the Cyclades: a small bronze cross let into it marks the exact centre of the dome above. Of the four smaller discs two are from the ancient Cipollino quarries at Stura in Eubœa. A third disc is of Irish green from the Lousouter quarry, Recess, Galway, and the fourth is of yellow breccia from Stazzema, Tuscany. The white in which these coloured marbles is inlaid is second-quality statuary marble from Crestola, near Carrara. For the rest of the pavement hard white marble from Serravezza is used, and the black comes from Mazy in Belgium. The marble was supplied and laid by Messrs. Farmer & Brindley, of London.

The chapel is heated by the hot-air apparatus of Messrs. Haden & Son, of Trowbridge, which is placed in a vault under the antechapel.

The copper and lead of the roofs was supplied and laid by Messrs. Dent & Hellyer, of Newcastle-street, Strand, London.

The building was erected under Mr. Richard Evans as clerk of works, "of whose care and pains both employer and architect feel they cannot speak too highly." The foreman during the first part of the work was Mr. Bleazard, who was succeeded, on his appointment as Borough Surveyor at Clitheroe, by Mr. Kitchen. The workmen were engaged and paid, and material bought, by the employer without a general contractor, though the labour in the carpentry and joinery was contracted for by Messrs. Brassington Brothers & Corney, of Settle.

CHURCH, BLACKHAM, SUSSEX.—The foundation-stone of a new mission church has just been laid at Blackham. When completed the building will be dedicated to All Saints'. It will consist of a nave and chancel with a stone bell turret. It is being built of stone from the Hackenden quarry at East Grinstead, with Bath stone dressings, prepared by Messrs. Jenner & Grynyer, of East Grinstead. The bricks used inside have all been made at Blackham. Mr. Charles Day, of Cowden, is the builder, and Mr. Lacy Ridge the architect. The accommodation to be provided is for 156 persons.

Correspondence.

To the Editor of The Builder.

A QUESTION OF RESPONSIBILITY.

Sir,—In a bill of quantities for work which I have now in hand I have put several prime-cost values for materials and fittings to be selected by myself, including a p.c. item for hot-water apparatus with an item attached "Allow for profit and waiting upon same." I find that the contractor whose tender is accepted has put nothing against the latter item. Can he now charge me for waiting upon and making holes, &c., for the hot water engineer? Omega.

SHAFTESBURY HOUSE, LONDON WALL.

Sir,—While there is time and opportunity to amend it, I desire to draw attention to the want of clothing with "architectural grace" displayed by the mass of irregular brickwork at the summit of Shaftesbury House, London Wall. This unsightly aggregation of rooms in the rear of the mansard roof of the Finsbury Circus frontage is the closing feature of the vista of Copthall-avenue, which joins London Wall at a right-angle.

It would be a pity for so fine a building to be left with this blot on its Skyline.

THE HOARDING BEAUTIFUL.

Sir,—The attempt in Holborn (and recently in the Strand) to make a hoarding, if not a thing of beauty, at least somewhat less of an eyesore than is usually the case, is certainly a laudable effort. A hoarding may be a necessary evil, but it does not follow that it should not be an ornamental one, and help to do what we hope the art poster on hoardings is doing, and that is the exerting of a little influence on the artistic sensibilities of that important person, "the man in the street."

Augustine C. Passmore.

*** Our correspondent might also have mentioned the hoarding recently erected by Messrs. Waring in Oxford-street: an excellent example.—Ed.

TESTS FOR WHITE LEAD.

Sir,—Could any of your numerous readers inform me through the columns of your paper the best and most effective test to apply in order to find out the quality of white lead? E. G.

The Student's Column.

GAS AND GAS FITTINGS.

15.—Gas Fires.

LUMINOUS AND NON-LUMINOUS FIRES.—Gas-fires may be divided into two classes—(1) those fitted with "atmospheric" burners, in which air is allowed to mix with the gas before the point of ignition; and (2) those fitted with burners to which air is not admitted before the point of ignition, and which therefore produce luminous flames. The heat produced per cubic foot of gas consumed is precisely the same in the two classes of fires, provided that the gas be consumed under suitable conditions, but the admixture of air before the point of ignition not only renders the flame non-luminous, but makes it much shorter, and the heat of combustion is therefore concentrated in a smaller area than in a luminous flame.

Radiated and Convected Heat.—Radiant heat is that form of heat which is transmitted from one body to another without materially raising the temperature of the atmosphere through which it passes. Convected heat is heat conveyed by particles of heated air or other similar medium. Rooms heated by convected heat alone (*i.e.*, by hot air, steam, or water pipes) are never so comfortable as those heated by the radiant heat from an open coal or coke fire. The temperature may be raised more economically by convected heat than by radiant heat, but the inhalation of heated air is prejudicial to health, and the walls of rooms heated by convected heat remain at a comparatively low temperature, and absorb heat from the human body. In rooms well heated by radiant heat the atmosphere remains comparatively cool, while the walls and furniture are raised to a temperature sufficiently high to prevent them abstracting heat from the body and producing a sensation of chill. Warming by radiant heat alone is, however, too costly for general practice, and a combination of the two systems is usually adopted. An incandescent gas fire is used as a source of radiant heat, while the hot waste products of combustion are led through channels at the sides and back of the fire and form a source of convected heat (fig. 37). The channels act as hot-air pipes, and raise the temperature of the atmosphere of the room.

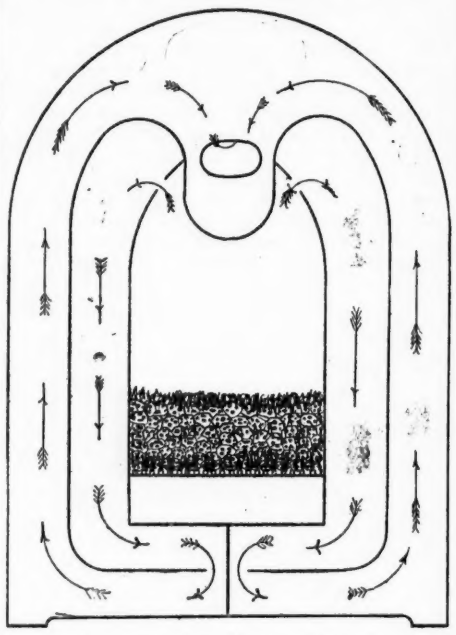


Fig. 37.—Gas Fire in Section.

A luminous flame contains solid particles of carbon in an incandescent condition, and therefore emits more radiant heat than a non-luminous flame, but the latter is more useful for indirectly producing radiant heat because it can be used for raising a suitable medium, such as fireclay or asbestos, to incandescence, and when thus employed is more effective as a source of radiant heat than the luminous flame.

"Atmospheric" Gas Fires.—Fires fitted with "atmospheric" burners must be supplied with gas under a pressure sufficiently high to prevent the "flashing back" of the flames when subjected to draughts of air produced by open doors or windows, and to enable the gas by its uprush to draw in sufficient air through the air-holes in the burner to produce a non-luminous flame. With London gas a pressure of about 1½ in. is a good working pressure for most of the fires now made. When the pressure becomes lower than this the flames have a tendency to "flash back," and when the pressure exceeds this limit the gas consumption becomes excessive and out of proportion to the heat obtained in the room. It is commonly stated that a pressure of ¾ in. is the most suitable pressure for gas fires, but this is certainly incorrect for average working conditions. It is now a common practice to mix carburetted water-gas with the coal-gas sent out from the gasworks. This mixture has a higher specific gravity than the coal-gas, and therefore should be supplied under a higher pressure; it has, moreover, a different chemical composition and requires less air for its combustion than plain coal-gas. As the proportion of water-gas in the mixture varies, so should the proportion of air admitted through the air-holes of the burner be varied. To meet this difficulty Messrs. Richmond & Co. manufacture a simple "water-gas attachment" (fig. 38) for gas fires by means of which the size of the air inlet to the mixing tubes of gas-fire burners can be regulated as required.

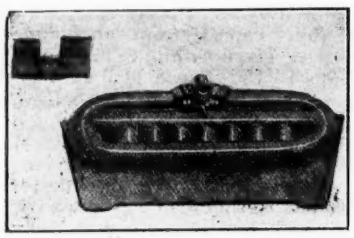


Fig. 38.—Water-Gas Attachment for Gas Fires.

The effect of mixing such large volumes of carburetted water-gas as the 30 per cent. and 40 per cent. now commonly used, and burning this mixture in fires adjusted to consume plain coal-gas is to cause the burners to produce short, greenish, noisy flames which do not reach the upper layers of fuel; but when the size of the air inlet is reduced the flame becomes elongated, the noise almost ceases, and the upper layers of fuel become incandescent.

A somewhat similar effect is produced by the accumulation of dust and dirt over the gas inlets of the burners, owing to the reduction of the volume of gas passing through them, the deflection of the current from its vertical flow, and the excessive proportion of air to gas in the mixture flowing to the point of ignition.

The burners (both nozzles and mixing tubes) of all gas fires require periodical cleaning, and it is an objectionable feature of many otherwise excellent gas fires that the burners cannot be removed and cleaned without the assistance of a gasfitter. Gas fires which are quite satisfactory when first used, often become in the course of a few months exceedingly unsatisfactory, and in many cases the consumer does not know whether the fault is with the gas or the gas fire. Dust from the asbestos or fireclay fuel, or from the atmosphere of the room, gradually accumulates in the mixing tubes and on the burner nozzles, the flames become shorter, greener, and more noisy, and have a strong inclination to "flash back," and at last the climax is reached when the fire cannot be lighted without allowing the flames to flash back, with the result that the flames become luminous and emit an intolerable noise and stench. In nine cases in every ten the burners are fitted in an inaccessible position, and are concealed by the outer casing of the fire, and consequently the average consumer is entirely dependent upon the local gasfitter. There is no reason why the burners should not always be fitted in a readily-accessible position, so that the consumer may, without undue inconvenience or loss of time, himself remove and cleanse them whenever necessary.

Ball Fuel for Gas Fires.—The so-called ball "fuel" for incandescent gas fires may be made of any refractory material, but some materials are more suitable than others, and the shape of the ball is a matter of considerable importance. At one time massive lumps of asbestos having only one central hole made through them were extensively used, but these will not become thoroughly incandescent in fires of ordinary size, and have now been superseded to a large extent by balls of more open formation constructed of fireclay or fireclay mixed with other silicates. The two descriptions of fuel are shown in fig. 39.

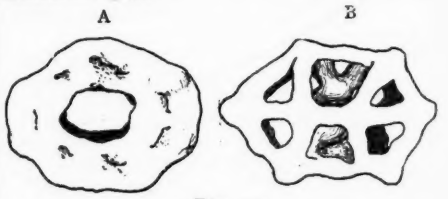


Fig. 39.

A. Gas Fire Fuel of Bad Shape.
B. Gas Fire Fuel of Good Shape.

The modern "hollow" fuel (*b*) becomes more uniformly heated, and is more rapidly heated to incandescence. Instead of using the refractory material in lumps it may with equal advantage be used in the form of vertical strips as in asbestos fibre fires, and even the old-fashioned iron spray fires are quite as effective as the modern ball fires. In the Clamond gas radiator manufactured by the Kern Burner Company, a number of vertical fireclay tubes, perforated throughout their length, are heated by non-luminous flames supplied by horizontal burners constructed on the principal used by Kern in constructing the Kern burner for incandescent gas lighting. The proportion of radiant heat emitted by these fires is unusually high.

Condensing Stoves.—When coal-gas is burned the hydrogen it contains unites with the oxygen of the atmosphere to form water vapour, which condenses to liquid water as soon as its temperature becomes sufficiently low. About one pint of water is produced from every 30 cubic feet of gas consumed. In condensing stoves the products of combustion are conducted through a number of vertical pipes, and become cooled below the temperature at which the water vapour condensesbefore they escape into the atmosphere. The water trickles down the pipes and is collected in a pan beneath the stove. But another compound always produced in large proportion when coal-gas is burned is carbon dioxide, or

carbonic acid gas. This gas is not condensed in condensing stoves to any considerable extent, and as it is not a supporter of animal life it should not be allowed to escape into the atmosphere of a dwelling-room. Condensing stoves are larger than ordinary fires, because they must contain sufficient condensing area to cause all the water vapour to condense, and are apt to convey an exaggerated impression as to their heat-producing capabilities. Condensing stoves are suitable for halls and greenhouses, but should not be used in dwelling-rooms, unless provided with a flue. The condensed water obtained in the collecting-pan is not pure water, but contains sulphur compounds and other impurities.

Flues.—No gas fire or stove should be placed in a dwelling-room without being connected to a flue capable of carrying the products of combustion away from the room. Many condensing and other fires are manufactured which are recommended as capable of burning gas without vitiating the atmosphere of a room even where no flue is employed, but no heed should be given to the assurances of vendors that a flue is unnecessary. A gas fire should never be used in a small dwelling-room unless connected to a flue having a natural updraught. Sometimes a gas fire is used in place of a coal fire because of the nuisance created by a smoky chimney, and, owing to the absence of soot when gas is burned, the fact that the down draught forces the products of combustion into the room is unheeded. Gas fires used under such conditions naturally cause headache and loss of health.

Vaporising Stoves.—Some persons complain that gas fires cause an uncomfortable dryness of the atmosphere of a room. Mr. Fletcher has conducted a series of experiments which prove that the atmosphere of a room is not rendered more dry by the use of a gas fire provided with a flue than by the use of the coal fire, and he is of opinion that the alleged dryness is always due to a trace of the sulphur compounds in the products of combusion escaping into the room through a defective flue. Where the flue is perfect and a strong up draught is maintained no such feeling of dryness is experienced. To meet all requirements, however, most of the gas-fire manufacturers now manufacture a fire fitted with a well to contain water, the water being slowly vaporised by the heat from the fire. Arden Hill's "Acme" vaporising fire is a fire of this description and is shown partly in section in fig. 40. A is the front casting of the fire, B the water vessel, and C the firebrick.

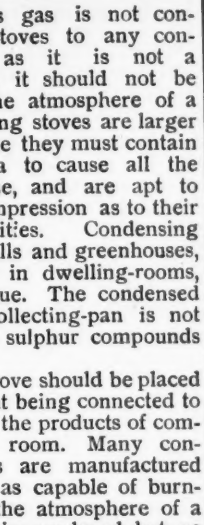


Fig. 40.—Vaporising Gas Fire.

Vaporising fires appear to be rapidly growing in popularity, and are very serviceable for sick rooms where a moist warm atmosphere is required. A shallow pan of water placed in front of an ordinary incandescent gas fire may, of course, be used instead of a specially constructed vaporising gas fire, but is not so convenient.

Reflecting Stoves.—Small luminous flat or rat-tail flames are employed for reflecting stoves, the flames being placed in front of a reflector of glass or polished metal. If the products of combustion are conducted through suitable tubes or chambers to utilise as much heat as possible before allowing them to escape into the flue, reflecting stoves form very efficient heating agents. They are less liable to get out of order and are more readily repaired than fires with "atmospheric" burners. As the flames never come in contact with any cool surface, they do not, as a rule, evolve any disagreeable odour or poisonous incomplete products of combustion, but they should, nevertheless, be connected to a flue. The temperature of the combustion products as they enter the flue should always be sufficiently high to feel hot to the hand. If cooled to atmospheric temperature, water would be condensed in the pipes, and the remaining combustion products, being heavier than air, would probably fail to rise to the top of the flue.

BOOKS RECEIVED.

THE ART OF BUILDING A HOME. By Barry Parker and Raymond Unwin. (London: Longmans, Green, & Co.)

A PRIMER OF GEOMETRY. By H. W. Croome Smith, B.A. (Macmillan & Co.)

OBITUARY.

MR. BROOKS.—We greatly regret to announce the death on the 7th instant at his residence, "The Grange," Park-lane, Stoke Newington, of Mr. James Brooks, senior member of the firm of James Brooks, Son, & Godsell, of 35, Wellington-street, Strand, W.C., and one of the most eminent architects of the day, especially in church architecture. Mr. Brooks was born at Hatford, Wantage, on March 30, 1825, and received his earlier education at the Grammar School, Abingdon. Coming to London in 1847 he was articled to Lewis Stride, attended Professor Donaldson's classes at University College, and entered as a pupil at the Royal Academy Schools. Having begun to practise just fifty years ago, he became a member of the Architectural Association in 1884; in 1866 he had been elected a Fellow of the Royal Institute of British Architects, of which he was a Vice-President, 1892-6, and member of the Council and of the Art Standing Committee, 1900-1. In June, 1895, he received at the hands of Mr. F. C Penrose, the President, the Royal gold medal; on that occasion we published his portrait in our columns of June 29, 1895. In June, 1888, he was appointed to succeed Joseph Clarke, deceased, as architect to the diocese of Canterbury; he was architect to the Diocesan Society of Canterbury, and was consulting architect to the Incorporated Society for Building Churches. Some years ago he took his son, Mr. J. Martin Brooks, into partnership, under the style of James Brooks & Son, in August last Mr. G. H. Godsell, of Hereford, was admitted partner of the firm, under the style of James Brooks, Son, & Godsell.

Of the principal architectural works planned and designed by Mr. Brooks, and more recently by the firm, a large number have been described and illustrated in our columns. Of new churches we should mention the following:—St. Michael's, at the corner of Paul and Mark streets, Shoreditch, and the reredos (executed by Earp), 1865; St. Saviour's, Hyde-road and Penn-street, Hoxton [May 5, 1866, two views*]; St. Columba's, Kingsland-road, Haggerston [December 11, 1869*]; St. Chad's, Nichols-square, Hackney-road, Haggerston, 1869; the Church of the Annunciation, Chislehurst, 1870, for which he designed the screen and superintended the designing and execution of the decorative frieze around the triforium stage of part of the church, and of the decoration of the Lady Chapel; St. Mary's, Wednesbury; St. Andrew's, Plaistow, 1870, and the screen (executed by Earp); the Church of the Transfiguration, Lewisham, 1882; St. Peter's, St. Leonard's-on-Sea [May 5, 1883*]; All Saints', Ipswich [July 28, 1883*]; St. Michael's, Coppenhall [May 17, 1884*]; St. John the Baptist, Holland-road, Kensington, 1877-8, completed in 1891, and the screen (sculptured by Mr. J. E. Taylerson [April 23, 1892, west front elevation; and June 29, 1895*]; Holy Innocents', Hammersmith, 1890-1, of which the new west portion was dedicated on April 27, 1901 [January 1, 1887*]; St. Andrew's, Willesden Green, 1886-7 [January 2, 1886*]; St. Mary's parish church, Hornsey, 1888-9 [May 12, 1888, and March 30, 1889*]; All Saints', Southend-on-Sea [October 1, 1887*]; the Church of the Good Shepherd (originally All Hallows), Mansfield-road, Gospel Oak, Highgate, and the parsonage, 1894-5 [March 23 and 30, 1889, December 29, 1894, June 29, 1895*]; St. Mary's, Highgate [August 15, 1896*]; St. Peter's, Hornsey, consecrated on July 1, 1898 [August 15, 1896*]; St. Luke's, Enfield [September 24, 1898, north-east view; and June 17, 1899, interior of east end*]; SS. Peter and Paul, Charlton, near Dover [May 30, 1891, view, elevation, plan, and section*]; the Chapel, Tonbridge School [May 14, 1892*]; and All Saints', Perry-street, Northfleet. To the foregoing should be added a stone pulpit for St. James's, West Hackney (Sir R. Smirke, architect); alterations at St. Mary's, Brunswick-street, Haggerston, in 1861 (Nash, architect, 1827); the remodelling of St. Andrew's, Totteridge, and addition of the chancel and apse, in 1869; oak screen, St. Matthias', Stoke Newington (Butterfield, architect), in memory of the late Mr. Robert Brett, who died in 1874; remodelling of All Saints', Norfolk-square, Paddington, after the fire, and addition of chancel, in 1873; completion of St. Faith's, Stoke Newington (Burges, architect), and the new mission hall [December 29, 1883*]; reconstruction and enlargement of St. Margaret's, Lee, upon the model of the Lady Chapel, Salisbury Cathedral, 1875-6 [June 30, 1888*]; restoration of the parish church, Northleach, Gloucestershire [October 6, 1883*]. An extensive range of stabling for the Marquis of Londonderry [February 17, 1883*]; a house at Rondebosch, Cape Town, for Mr. W. H. Stryben [July 13, 1889*]; and the South-Eastern Railway Company's hotel at Deal [June 17, 1893]. On January 15, 1887, we published Mr. Brooks's designs, with elevations, sections, and plans, for St. Paul's Church, Vicarage Gate, Kensington; his remarkable design for the proposed cathedral at Liverpool, and the Chapel of St. John, was illustrated in the *Builder* of Jan. 9 and 16, Feb. 6, March 6 (views, plans, sections, and elevations), 1886; and April 28, 1888 (study of one bay of choir); and June 8, 1889 (interior and exterior of the Chapel of St. John). In July last the designs and plans prepared by the firm of Messrs. James Brooks, Son, & Godsell for the Hereford Municipal Buildings were, with two other sets, marked "reserved," out of forty-six sets submitted, Mr. Thomas Blashill being the assessor. Mr. Brooks's designs for the restoration of the parish church at Hatford, his native place, were exhibited at the opening conversazione of the Architectural Exhibition, in December, 1855; we believe the work was not carried out until some years afterwards.

MR. LITTLEWOOD.—We regret also to announce the death, on September 25, at his residence in Lansdowne-villas, Old Trafford, of Mr. John Littlewood, in his seventy-third year. Mr. Littlewood—a son of the architect, Joshua Littlewood, of Holmfirth, Yorkshire—was senior member of the firm of Mangnall & Littlewoods, of Manchester, whose practice will, we understand, be carried on by his brother and surviving partner, Mr. William H. Littlewood. Mr. John Littlewood was elected an Associate of the Royal Institute of British Architects in 1882, and a Fellow in 1888; he had been during a long period a leading member of the Manchester Society of Architects. Having served as an articled pupil of the firm of Messrs. Travis & Mangnall, of Manchester, he, after Mr. Travis had retired, was taken into partnership by Mr. William Mangnall. On the death of the latter, he and his brother, Mr. William H. Littlewood, in 1875, entered into partnership under the name of Messrs. Mangnall & Littlewoods, and established an extensive practice as architects and engineers, mainly in association with the construction of workhouses and public baths, and of hotels, piers, concert pavilions, ballrooms and similar structures at Blackpool, Morecambe Bay, Colwyn Bay, Bridlington, and other places of popular resort in the northern counties. Of the principal works designed and carried out by the firm we may mention the following:—The public baths at Broughton for the Corporation of Salford, for which their plans and designs were selected, in October, 1889, out of those submitted by seven competitors; the enlargement, at an estimated cost (for the building) of 58,000*l.*, of the Stockport workhouse, on the Shaw Heath site, to accommodate 1,098 inmates; the public baths, at the corner of Regent-road and Derby-street, Salford, for the Salford Corporation; the new workhouse at Patricroft for the Guardians of Barton-upon-Irwell Union, for about 500 inmates—their plans having been accepted in competition in 1892; the Victoria Pavilion Theatre, as an addition to the buildings in the winter gardens at Morecambe, 1896-7; the Hôtel Métropole, at the end of the West End Promenade, Morecambe, for which their plans were awarded the first premium by Messrs. Harrison, Hall, and Moore, the assessors, in July, 1897; the pier, with pavilion, at Morecambe, opened in July, 1898; the Victorian pier and concert pavilion at Colwyn Bay, begun in May, 1899, and opened on June 2, 1900; the new stands, including a grand saloon and a covered promenade, on the Roodee course at Chester for the Chester Race Company; and the grand stand on the flat-race and steeplechase courses recently laid out on the Low House estate, for the Ripon Racecourse Company. In a competition in January last, Messrs. Mangnall & Littlewoods won the first premium with their plans for the extension of Prince's Parade, with an iron pier and promenade and pavilion at Bridlington; and in 1899 they were appointed architects and engineers for the pavilion and promenade pier at the North Cliff, Bridlington, for the Pier and Pavilion Company, as also of the Grand Hotel, with theatre, arcade, &c., on the Beaconsfield Estate, Bridlington. They were invited in May, 1898, to take part in the competition for the new worknouse buildings at New Cross, Wednesfield, for the Wolverhampton Board of Guardians, on which occasion an honorarium of 100*l.* was awarded, upon the adjudication of Mr. Aldwinckle, in respect of the plans and designs submitted by Messrs. Mangnall & Littlewoods and Mr. M. Johnson, as joint architects. In 1877 the firm were appointed to carry out the design and construction, at an estimated cost of nearly 800,000*l.*, of new gas works for the Manchester City Council upon a site of 39 acres near Philips Park.

MR. W. SWIFT.—We have also to announce the death, on September 24, in his fifty-second year, at his residence, No. 5, The Parade, Truro, of Mr. William Swift, of No. 4, Princes-street, Truro, architect and surveyor. When about thirty years of age Mr. Swift removed from Birmingham to Truro. After having been employed under Messrs. Henderson at the Mining Schools he started in practice independently eight or nine years ago. Of his architectural works during that period we may cite a house at St. Clement's Hill, Truro, for Mr. M. H.

* Illustrations in the *Builder*.

* Illustration in the *Builder*.

Williams; the church Sunday-schools at Perran-ar-Worthal, built of local stone with granite facings; the Hotel Buildings, Truro, for Messrs. Mallett & Co.; an enlargement of the National School Buildings, Falmouth; the Swan Hotel, Truro; a residence, near Tregony, for Mr. T. H. Beard; alterations and improvements of the Fountain Hotel, St. Mawes; and new business premises, for Messrs. J Grose & Sons, in Porhan-road, Falmouth.

Mr. Watson.—We regret to announce also the death on October 3, at Wakefield, in his sixty-first year, of Mr. William Watson, a well-known member of the profession in the West Riding. One of his latest works was the Canal-lane Board School, for 460 children, at Lofthouse Gate, near Wakefield. Mr. Watson made the plans and designs for the infirmary and steam laundry at the Wakefield workhouse, built in 1897-8, at the rear of the old workhouse buildings in Park-lane, to accommodate 150 patients, a resident medical officer, lady superintendent, nursing staff, and servants, in a central block with two pavilions.

GENERAL BUILDING NEWS.

Church, Chichester.—The foundation-stone of a new parish church for the district of Rumboldswyke, one of the suburbs of Chichester, was laid recently. The church is to be called St. George, and, when erected, will provide accommodation for 500 people, the cost under the contract, which is in the hands of Messrs. Dove Brothers, with Messrs. J. E. K. & P. Cutts, of London, as architects, being 3,500*l.* The edifice, when completed, will consist of nave, north and south aisles, chancel, morning-chapel, organ-chamber, vestries, and west porch. The church is being built of local stock bricks, with moulded red-brick jambs and arches throughout. The roof will be open timber. The body of the church will be paved with wood blocks and seated with chairs, and the chancel will be paved with tiles laid in patterns.

Church Extension, Ravensthorpe.—Additions to St. Saviour's Church, Ravensthorpe, were consecrated by the Bishop of Wakefield recently. The addition to the church consists of transepts, a north chapel, and a large vestry chancel, and a north aisle is to be added, with clearstory and arcading to the nave, the cost in all being estimated at 8,500*l.* Mr. C. H. Fowler, F.S.A., of Durham, prepared the designs, and Mr. Thickett, of Horbury, has carried out the work.

Proposed Restoration of Kildwick Church, Yorkshire.—The scheme for restoring the old Church of St. Andrew, at Kildwick, popularly known as the "Lang Kirk o' Craven," will be begun very shortly. The scheme is one prepared by Messrs. Austin & Paley, architects, of Lancaster.

Presbyterian Church, Limerick.—A new Presbyterian church has just been erected at Limerick by Messrs. John Ryan & Sons, builders, from the plans of the architect, Mr. G. C. Ashlin, Dublin.

Church for Smethwick. — The foundation-stone of a new church for the recently formed parish of St. Stephen's, Smethwick, was laid recently by Mr. G. F. Chance. The architect is Mr. F. T. Beck, of Wolverhampton. It was stated that the total cost of the church would be 4,750*l.*

Parish Church, Hove.—The new parish church, Hove, has just been opened. The church is of Sussex sandstone, from the quarries of Sir Weetman D. Pearson, Bart., M.P., at Paddockhurst, Worth, and has been erected to the designs of the late Mr. J. L. Pearson, R.A. The seating accommodation is for about 1,300, and the church is 160 ft. long and nearly 80 ft. broad. The nave, which, including the transept, is 108 ft. long and 35 ft. wide, is divided into six bays. The two western bays, which open respectively into the baptistry and the base of the tower, are marked by lofty moulded arches springing from clustered piers attached to the north and south walls. The next four open into the north and south aisles, and are each of them 16 ft. wide. The arcades consist of clustered piers, 17 ft. high, from which spring pointed arches. Above these comes the clearstory. The two eastern bays of the nave, which open respectively into the north and south transepts, are somewhat wider than the others, and the arches reach up to the level of the clearstory. The chancel arch is of a similar height and design to that which separates the western bays from the nave proper, but is more rich in detail; and beyond this the three bays of the chancel carry on the design of the nave, and from their width provide space for the choir stalls. One of the features of the church is the sanctuary, which is 23 ft. in length. Although entered by an arch, 58 ft. high and 35 ft. wide, the sanctuary is gradually narrowed in width to 27 ft. The east windows—three in number, with two lights each—are deeply recessed within pointed arches with clustered piers. There are also two lofty windows on either side of the chancel. The two aisles are respectively 21 ft. and 16 ft. wide internally, that on the south side of the nave being the wider of the two, and are lighted with windows of three lights each; while the transept is lighted by a traceried window of five lights at the south end and a rose window at the other end. Leading out of the south transept, a small chapel, 46 ft. by 21 ft. provides accommodation for daily or occasional services. It is 32 ft. in height. Like the baptistry at the west end of the church, it is vaulted throughout, and at the east end it terminates in a polygonal apse. The south wall of the two western bays of this Chapel, it may be added, is completely filled in with six-light windows of very broad proportions, while those of the apse are of three lights each and are comparatively narrow and lofty. To the north of the choir and sanctuary there is the organ loft and two vestries, that for the choir measuring 20 ft. by 24 ft., and over the vestries there is a church-room with accommodation for about 100 people. The roof, except where it is vaulted, is of oak. In the nave it is divided into six bays by clustered wall shafts rising to a height of 36 ft. From this height a series of cross arches carry it up to within 10 ft. of its extreme height, where it terminates with a simple cornice. The total cost will exceed 40,000*l.*

St. Botolph, Stow Longa.—The ancient church of St. Botolph, Stow Longa, Hunts., was reopened on Wednesday, the 2nd inst., after the rebuilding of the clearstory and erection of new roofs to the nave and aisles from the designs of Messrs. John & S. Inskip Ladds, joint architects, London. The church dates from Late Norman times, and has a fine priests' door with carved tympanum. The nave arcades are Early English, and the aisles are chiefly of Late Decorated date, while the fine west tower and the windows of the chancel are Early Perpendicular. It would appear that the clearstory and nave were destroyed (probably by a storm) in the seventeenth century, when the walls were levelled, and a plain roof of barn-like character put on, and covered externally with tiles. When the chancel was restored, in 1880, certain works were also done in the nave, and amongst other things the broken stones of the clearstory windows were found. These were of simple Perpendicular character, and have given the keynote to the present work. The lower half of the clearstory remained, and the small buttresses at the west end were sufficiently intact to show the original height of the clearstory walls. Weldon stone has been used throughout, and the mason has been Mr. H. Ashley, of St. Neots. No sufficient evidence of the form of the old roof remained—it was probably of flat pitch covered with lead, but owing to the great cost of adopting this form for the new work, it was determined to retain the steeper pitch of the seventeenth-century roof, and to re-use the old tiles, thus preserving some memory of the last roof. Another link with this roof is formed by the old tie beams which have been framed into the three middle principals, where they will still continue to perform the work they have done in the past. The aisle roofs are quite plain, except the eastern part of the south aisle, where an ancient chapel has again been fitted up with an altar (for use as a morning chapel), and here the roof is ceiled with oak boarding, having moulded ribs and carved bosses. The whole of the timber is English oak of large scantlings, supplied by Messrs. Francis & Sons, of Huntingdon; Messrs. Wrycroft & Sons, of St. Neots, being the contractors for the carpenters' work. The glass is by Messrs. Pepper & Sons, of London, and the lead work of aisle roofs, &c., by Messrs. Peacock & Sons, of Huntingdon. A new wood block floor has been laid to nave and aisles by Messrs. Goddard & Sons, of Farnham, Surrey. The new side altar, made by Mr. Reid, was also designed by Mr. Ladds. The total cost of the work has been 1,150*l.* This work practically completes the restoration of the church, which has extended over twenty-five years.

Infectious Diseases Hospital, Berwick.—The Town Council of Berwick having applied to the Local Government Board for sanction to borrow 5,500*l.* for the erection of an infectious diseases hospital, the Local Government Board held an inquiry at Berwick Town Hall on the 2nd inst. Mr. Wm. Weatherhead, the clerk to the Sanitary Authority; Dr. Heagerty, medical officer of health; Mr. J. L. Miller, architect; and others were heard in support of the scheme.

School Board Offices, King's Norton. — These new offices occupy a site adjoining what was the schoolmaster's house. The style is Free Renaissance, and the building is built of bricks with a liberal use of red terra-cotta dressings, the roofs being tiled. The accommodation consists of a roomy entrance-hall and corridor, from which is entered the boardroom, an apartment 28 ft. long, 17 ft. 6 in. wide, and 18 ft. in height. It is handsomely fitted up, and has a pitch-pine panelled dado, open roof with cut and carved principals, and stone corbels. The clerk's office adjoins the boardroom, and is provided with a fireproof strong-room. There are also a waiting-room, cloakroom, and lavatory; and there is communication with the caretaker's house. The buildings are heated with low-pressure pipes and radiators, in addition to open fireplaces. The buildings have been carried out from designs by Mr. Edward Holmes, Corporation-street, Birmingham, and the contractor is Mr. Harvey Gibbs, of King's Heath.

Infirmary, Retford. — The new infirmary in connexion with the Retford Workhouse was opened on the 25th ult. The building, which was commenced sixteen months ago, has been erected at a cost of 4,000*l.* It is built on the north side of the workhouse premises, and extends for nearly 200 ft. The whole of the buildings are of ordinary red wire-cut bricks, and the roofs are slated with Bangor slates. There are three entrances: the main, one for the males, and another for the females. The whole of the rooms are heated by means of hot-water and circulating pipes. The architect was Mr. W. Southall, of Retford.

Schools, Prestwick, Ayr.—The ceremony of laying the memorial-stone of Prestwick High School was performed on the 24th ult. The building is to accommodate 300 scholars. It contains a hall, 60 ft. by 20 ft., five classrooms, male and female teachers' rooms, cloakroom, and all other conveniences. The building is of red stone, and its total cost will be about 5,000*l.* The architects are Messrs. J. & H. V. Eaglesham, Ayr, and the contractors are:—Masons, Messrs. George Reid & Son, Catrine; joiners, Messrs. Paterson & Anderson, Ayr; slater, Mr. J. C. Highet, Ayr; plumber, Mr. James Lockhart, Prestwick; and plasterer, Mr. William Glen, Ayr.

Additions to Science and Art School, Montrose, N.B.—The extensive additions to this building are nearly completed. The principal feature is the workshop, which occupies the eastward portion of the building, and which fronts both to Russell-street and Palmerston-street. It is 40 ft. wide, 24 ft. broad, and 15 ft. from floor to ceiling. The shop is fitted with wood-block flooring, and contains twenty-four benches for workers in wood, eight benches for workers in metal, cabinets for specimens, a forge, &c. Immediately to the west of the workshop is the physical laboratory, 30 ft. by 27 ft. Here there are working benches, desks, demonstrator's table, &c. Next to that is a room, 30 ft. by 20 ft., to be used as physical demonstration room. It is fitted with table for demonstrators, benches for students, and museum cases. Next to that room is the chemical laboratory, in which are benches for twenty-four students, demonstrator's table, and fume boxes. To the west of that, again, is the preparation room, 20 ft. by 8 ft., in which the material to be used by the demonstrators will be stored, and where there is a still. Next to that is the balance room, 14 ft. by 7 ft., which, amongst other apparatus, contains a stone balance table to ensure that in measuring out the chemicals there shall be an absence of vibration Continuing westward, the chemistry demonstration room is next reached, which is fitted up with the necessary apparatus. There is also room for the storage of casts from the antique, patterns, models, &c.; while what has hitherto been used as an art classroom in the old building has been entirely remodelled and fitted up with cupboards, "stages" for pupils, diagram frames, &c., and storage has also been provided for clay, zinc, and other materials. The walls of all the rooms are lined with pitch-pine to a height of 4 ft. 6 in., and above that are lathed and plastered. The whole building will be heated with hot water from a heating chamber below the cast room. The piping is carried in ducts under the flooring, and these are connected with radiators placed in the various rooms. The whole will be lighted by electricity, but gas has also been introduced into the laboratories and chemistry and other departments, to be used in the work of the school when required. The porches leading to the different rooms are floored with encaustic tiles, and the walls of the porches are lined with tiles to the height of 4½ ft. The site has cost 1,000*l.*, the contracts amount to about 4,000*l.*, and the cost of furnishing is estimated at 700*l.* The following were the contractors for the work:—Mason—Messrs. J. Ford & Son, Montrose; joiner—Mr. John Davidson, Montrose; plumbers—Messrs. C. Wood & Co., Montrose; slaters—Messrs. J. Lindsay & Son, Montrose; plasterers—Messrs. J. Burness & Son, Montrose; electricians—Angus Electric Lighting Company; heating apparatus—Messrs. C. Wood & Co. The wood-block flooring has been laid by Messrs. Geary, Walker, & Co., London; and the furnishings have been supplied by Mr. J. Davidson and Mr. G. Fairweather, Montrose, and Mr. John Gill, Aberdeen. The architect is Mr. John Sim, of Montrose.

Convent, Waterford.—The foundation stone of the new chapel to be erected in connexion with the Good Shepherd Convent in Waterford was laid recently. The new chapel will comprise Nun's choir and avant choir at the west end of the nave. There will be two side aisles—one for the accommodation of penitents, and the other for the children of the Industrial School. The principal entrance to the church will be at the west end, having a doorway with double moulded arch and jambs, together with polished marble columns with carved caps and moulded bases. At the west end there will be a circular window filled in with tracery, and having a moulded arch and label over. An arcade of thirteen arches will extend across the full width of the gable. The bell turret will be of octagonal shape, and will go to a height of 75 ft., 9 in. of which will be carried up at the junction of the gable on the penitents' aisle. The Sanctuary will be lighted by a large five-light tracery window. The nave of the church will be divided from the aisles by an arcade of five arches on each side, having polished Aberdeen granite columns with double moulded caps and bases. The nave and Sanctuary on the sides will be lighted by circular sexfoil tracery windows, fifteen on each side. The roof will be divided into eight bays, supported by trusses, resting on shafts, with carved and moulded caps and bases, with corbels

carved as angels underneath. At the west end of the chapel there will be a large organ gallery, extending the full width of the nave and aisles, having underneath glazed screens, with doors from avant choirs and cloisters. The work will be carried out by Messrs. John Hearne & Son, Waterford, from the plans and under the superintendence of Mr. Wm. H. Byrne, architect, Dublin.

BATHS, CHESTER.—New public baths have just been opened at Chester. The larger of the two baths is the second-class bath, and this, which is only available for the male sex, is 75 ft. long and 35 ft. wide, with a depth of water varying from 3 ft. 6 in. at one end to 7 ft. at the other, and surrounded by dressing compartments, and up above a gallery, in which at water polo and swimming matches there will be accommodation for spectators. When it is not in use as a bath the fittings can be removed, and this bath can be adapted to a gymnasium, or for any other purpose. The first-class plunge bath is rather smaller, being 60 ft. by 30 ft., and so many times a week this will be reserved for ladies. Both baths are lined with white glazed bricks. There are seven second-class slippers and one vapour, three men's first-class slippers and one vapour, and four women's slipper-baths, with waiting-rooms and separate entrances for the sexes. Besides the actual bathing area there are laundry, ironing-room, fitting-shop, and a boiler-house with passage around the whole of the baths, below ground. Then there are the offices and the house of the superintendent. The water used in the baths is taken from the city mains, and heated to what temperature may be required. The baths themselves are heated throughout with steam. The cost of the buildings, which are built in stone and Ruabon brick, was about 11,300*l.* The architects for the baths have been Messrs. Douglas & Minshull, and the contractor Mr. W. W. Freeman.

BUSINESS PREMISES, SUNDERLAND.—Plans have been submitted to the Building Committee of the Sunderland Corporation for the erection of business premises on the site of the Wesleyan Church in Fawcett-street, which was recently purchased by Messrs. Lockhart, Smith & Co., Limited, for 15,500*l.* The chapel is to be pulled down, and the building which it is proposed to put up in its place is to be three and a-half stories in height, with a basement, which will be used as a cafe. The ground floor will consist of three shops. The architects are Messrs. W. and T. R. Milburn, of Sunderland.

BOLTON UNION HOSPITAL. — New buildings have been erected to accommodate the nurses engaged at the new Townley's Hospital connected with the Bolton Union Workhouse at Fishpool, Farnworth. The nurses' home has a frontage of 184 ft. and is in three stories above the basement. The exterior is kept plain; stone sills are put in the windows, but all other dressings are of Ruabon red terra cotta, the general brickwork being faced with local stocks. Accommodation is provided for forty nurses, each having a small separate bedroom. The architects are Messrs. Bradshaw & Gass.

MESSRS. REYNOLDS'S WORKSHOPS.—The Acorn Works, Edward-street, Blackfriars-road, belonging to Messrs. F. W. Reynolds & Co., the makers of wood-working machinery, have recently been enlarged. The adjoining premises having become vacant, two large workshops, each 75 ft. by 30 ft, have been erected there, one as a machine-shop and the other as an erecting-shop, and also a smith's shop adjoining the other two. A large additional yard space has also been acquired, with frontage to Bear-lane. The machine-shop is fitted with a wrought iron gantry extending over the whole surface and carrying a travelling crane. The gantry also supports the line shafts which run the whole length of the building on both sides. The machines driven from these shafts are three large planing machines, eight lathes, one radial drilling machine, one pillar drilling machine, one lathe headstock for large work, one shaping machine, one slotting machine, grindstones, and emery grinding apparatus, &c. A large "lining-out" table has also been erected on a brick foundation, and conveniently placed under the crane. The contract for the buildings was undertaken by Messrs. John Hoare & Son, of Blackfriars-road, under the direction of Mr. Cory, Messrs. Reynolds & Co.'s engineer.

BOARD SCHOOLS, ROTHERHAM.—Three new sets of Board schools were opened recently at Rotherham. In the spring of 1898 the Board invited competitive plans for two new schools at Doncaster-road and Park-street. Plans prepared and submitted by Mr. J. E. Knight, architect, Rotherham, were selected by the Board, and approved by the Education Department; the buildings were commenced early in 1899. The contract of Mr. Richard Snell was accepted for Doncaster-road for 10,557*l.*, and that of Messrs. Chadwick & Co. for Park-street for 9,279*l.* 10s. The site for the Doncaster-road schools was purchased from Earl Effingham, and contains 1 a. 2 r. The buildings are one-storied, and are arranged so as to allow for them and the playgrounds the sunniest aspect, room being left for future extensions. Accommodation is provided for 800 children, comprising boys' department, 240 places; girls' department, 240 places; infants' department, 320 places. Provision for cookery classes in the girls' department is provided. Cloakrooms and lavatories are placed near the entrance. Teachers' and store rooms and lavatories are in the roof. Caretaker's sinks and cupboards are provided. The basement contains heating chamber and coal place. The floors to all rooms are of pitch-pine wood blocks on concrete; those to the corridors are of concrete checkered to prevent slipping. The fireplaces are in coloured glazed bricks with stone mantels. The buildings are heated independently of the fireplaces by pipes and radiators on the low-pressure system. Play-sheds for each department are provided. There is also a caretaker's house. Externally the buildings are of Dunford Bridge rock-faced wallstone, with Grenoside stone dressings, and have green Westmoreland slated roofs. The style is English Renaissance simply treated. The site of the Park-street schools contains an area of 10,340 square yards. The accommodation is for 800 children in three departments—boys and girls 240 each, and infants 320 places. Uniformity has been gained by placing the boys' and girls' schools at the top of the site, side by side, divided by a division wall. The infants' school is placed in the centre of the site. The internal arrangement of these schools is very similar to those at Doncaster-road, the "classroom" system of planning having been adopted here also. The walls are faced with Dunford Bridge rockies, with St. Bees' stone dressings, and green slates to the roofs. A new infants' school, also built from plans prepared by Mr. J. E. Knight, has recently been opened at Thornhill on a site adjoining the existing schools. The new school is built to accommodate 400 children, and contains seven large classrooms (average size, 24 ft. 6 in. by 23 ft.) and a marching hall. There are also two cloakrooms, two lavatories, teachers' rooms and lavatories, storerooms, caretaker's sinks, and a heating chamber and coal-place in basement. Movable glazed screens divide the classrooms from the marching hall, into which all the rooms open separately. By removal of all screens a large place of assembly is formed. A large covered play-shed is provided in the playground, also the necessary conveniences for the children. The caretaker's house is facing Tenter-street. The buildings are of local bricks, with St. Bees' stone dressings.

BOARD SCHOOL, NEWTON HEATH, MANCHESTER.—A memorial stone was fixed in the wall of the St. Mary's-road Board School at Newton Heath on the 5th inst. The school is the thirty-sixth built by the Manchester School Board. It is designed by Mr. Rawle and is being built by Messrs. Bullivant & Sons, and is meant to accommodate the scholars now attending the Oldham-road Board School, formerly known as the Newton Heath Wesleyan School.

TECHNICAL SCHOOLS, SOUTHEND.—The foundation-stone has just been laid of the new technical schools now being erected at the junction of London-road and Victoria-avenue, Southend, as part of a scheme of public buildings, to include town hall and municipal offices. The accommodation in hand will comprise a large lecture hall, laboratories, and demonstration-rooms, classrooms, a complete art school, and all necessary adjuncts. The estimated cost of erecting, equipping, and furnishing the new schools is 19,000*l.*, exclusive of the site, which belongs to the Corporation. The architect is Mr. Henry T. Hare, of Bloomsbury-square; and the builder is Mr. Ernest West, of Chelmsford.

BOARD SCHOOL, GRIMSBY. — The foundation-stones were laid at Grimsby recently of a new Board school. The building will give accommodation for 1,500 children, and the cost is estimated at 21,000*l.* Mr. Herbert C. Scaping is the architect, and Messrs. J. M. Thompson & Sons are the builders.

LONDON CITY AND MIDLAND BANK, BIRMINGHAM.—New premises of the London City and Midland Bank, at the corner of Temple-row and Cherry-street, Birmingham, have been opened. The building, which is four stories high, has been erected from the designs of Mr. T. B. Whinney, of London, and Messrs. Mansell & Mansell, Birmingham, and presents a frontage to St. Philip's Churchyard. The style is a rather free treatment of the Italian Renaissance period, the ground floor being boldly rusticated with Tuscan columns, and the story below the main cornice emphasised by carved panels. There is a broad plinth of unpolished Guernsey granite, the main structure being in Portland stone, an iron railing surrounding the building on the pavement level. The whole of the ground floor is occupied by the bank, and in the basement are the strong rooms, voucher stores, lavatories, clerks' rooms, &c. The entrance is on the angle of the building, the corner being carried upwards and finished off in the form of a cupola. Altogether the bank is 80 ft. long, 32 ft. wide, and 22 ft. high, and the upper floors, approached by a lift, are to be utilised as offices, &c. Massive columns of rouge royal marble support the carved and decorated ceiling. A panelled walnut dado, about 5 ft. high surrounds the bank inside, and the pavement of the space used by the public is of grey and white marble.—*Birmingham Gazette.*

APPOINTMENT OF SANITARY OFFICERS.—The Local Government Board has sanctioned the appointment of the following sanitary officers:—Mr. R. K. Brown, medical officer of Bermondsey; Mr. T. H. Littlejohn, medical officer of Hampstead; Messrs. R. W. Hindhaugh and E. A. Norman, sanitary inspectors in Finsbury; Mr. C. Langstone, sanitary inspector in Shoreditch; Messrs. J. Newby and H. L Hyde, sanitary inspectors in Southwark; Mr. R. Simpson, sanitary inspector in Stepney.

MISCELLANEOUS.

PROFESSIONAL AND BUSINESS ANNOUNCEMENTS.—Mr. Burke Downing, architect, has removed his London office to 12, Little College-street, Westminster, S.W.——Messrs. Heazell & Son, architects, of Nottingham, have removed their offices from Bank Chambers, Market-place, to Burton Buildings, Parliament-street, Nottingham.

THE STOCK BRICK TRADE.—A Sittingbourne correspondent states that there is a gloomy outlook for the stock brick trade this winter. The Kent and Essex Brickmasters' and Flint Merchants' Protection Association has found it necessary to lower the price of stocks 4s. a thousand, and has given notice that "on and after October 11 the advance hitherto paid in freights will be taken off and the freights paid will be according to the Association lists." This removes the last of the advances made to the brickmakers and barge masters four years ago, when good prices were ruling. The barge masters received an advance of threepence per thousand on the freights at that time, but the advances to the brickmakers was taken off last year. The present reduction will affect practically all the barges engaged in the Kent and Essex brick trade, as all the principal firms are in the Association. In the Sittingbourne and Milton district, which is the centre of production in the stock brick industry, for the first time for several winters men are being "stood off" from their employment; and in other districts barges are being laid up for the season. The brick trade has been brisk, and the exports from Milton Creek for the past six months show an increase over the corresponding period of last year. The flint trade has more than held its own.—*Morning Advertiser.*

PARE'S BANK, LEICESTER.—Messrs. Archibald Smith & Stevens ask us to mention that they supplied the lifts in this building, illustrated and described in our issue of the 21st ult.

ELECTRIC LIGHT INSPECTION BOXES AND THE LONDON BUILDING ACT.—The Stepney Borough Council proposes to convene a conference of Metropolitan Councils to consider the recent decision of the Divisional Court upholding the finding of the magistrate in the case of Crow *v.* the Whitechapel Board of Works. In that case the District Surveyor summoned the Board for having failed to give notice, in accordance with Section 145 of the London Building Act, of intention to construct inspection chambers and street boxes for electric lighting mains. It was contended on behalf of the plaintiff that the boxes were "buildings," "structures," or "works" within the meaning of the section in question, and the magistrate, holding that an offence had been committed, inflicted a nominal fine with ten guineas costs. The Divisional Court, which is the final court for a matter of this kind which comes under the Summary Jurisdiction Acts, dismissed the appeal with costs. In consequence of this decision the Stepney Borough Council, which has absorbed the Whitechapel area, approached the London County Council with a request that facilities might be afforded for raising the point in a civil action, so that a decision of the Court of Appeal might be obtained, or that the District Surveyor should be asked not to insist upon strict compliance with the section upon which he founded his action. As the London County Council is unable to grant either request, the Stepney Borough Council has decided to hold a conference to consider the question, and delegates from other borough councils are being asked to attend. It is considered that if the law as laid down by the Divisional Court is allowed to stand, the effect will be to retard the progress of electric lighting, and at the same time involve the boroughs in heavy and unnecessary expense by having to pay fees to the District Surveyors in connexion with the chambers and boxes.

THE LONDON SKETCH CLUB.—The private view of the Seventh Exhibition of Sketches by the members of the London Sketch Club will be held on Saturday, 12th instant, at the Modern Gallery, 175, Bond-street, W., and the exhibition will be open to the public from the 14th to the 26th inst. inclusive.

LABOUR MARKET IN THE COLONIES.—The October circular of the Emigrants' Information Office (31, Broadway, Westminster) states that in *New South Wales* the strike of the ironworkers' assistants, which lasted some weeks, has been settled by reference to arbitration; the men demand a uniform wage of 7s. a day, and the employers decline to give that wage to any except first-class men, others to have 6s. The building trade is brisk, and there is a continued demand for plumbers and competent labourers. At Broken Hill there is a demand for skilled silver miners, engineers, and fitters. Recent reports show that there is practically no demand for labour at Hillston, Newcastle, Lithgow, Bulli, Young (except for farm and station hands), Mudgee (except for ploughmen), Wilcannia, Walgett (except for farm and station hands and for female servants), or Bourke. In *Victoria* the drought has broken up to some extent in the Mallee and other parts, and this should improve the demand for labour in the country districts. There have been demonstrations of the unemployed in Melbourne, though it is often difficult to procure competent workmen. In Castlemaine, Bendigo, Daylesford, &c., there is no demand for labour. In *South Australia* the supply of local labour is sufficient.

Queensland is still suffering from the drought, and emigrants, other than female servants, are not recommended to go there at present, unless they receive nominated passages or take a little money with them. In *Western Australia* the report of the Government Labour Bureau for the quarter ending June 30 last shows as follows :—There is a demand for competent mechanics in the building and other trades at Northam, Perth, and Dongarra, and for sawmill hands at Albany, but otherwise the supply in the colony is quite sufficient, and in some places, as Coolgardie, Kalgoorlie, Freemantle, Collie, and Albany the supply is in excess of the demand. During June, 388 persons called at the bureau in search of work. The serious strike of railway line repairers, which arose on a question of wages, has been settled by arbitration. The repairers are to receive 8*s.* a day instead of 7*s.* The last reports from *New Zealand* show that the building and engineering trades continued busy almost everywhere. In *Natal* a few skilled platelayers only are wanted on the railways. They must be from 25 to 40 years of age, and must have had at least five years' experience on railways; candidates must apply to the Agent General for Natal, 26, Victoria-street, London, S.W., stating age, height, and experience, and enclose testimonials. In *Cape Colony* there is officially stated to be a demand for thoroughly skilled mechanics in the building trades. Otherwise all persons are again warned against going to South Africa at present in search of professional or manual work unless they have ample private means to meet the very high cost of living, or have engagements to go to. They will not as a rule be allowed to proceed up country.

WOLVERHAMPTON ART AND INDUSTRIAL EXHIBITION.—Another important step in the preparations for the forthcoming Wolverhampton Art and Industrial Exhibition was, says the *Wolverhampton Express*, taken recently, when the Buildings Committee met and considered the tenders sent in for the erection of the great Machinery Hall. This in some respects will be the most important building erected. It will stand next to the Industrial Hall, separated from it by Devon-road. It will be 350ft. in length and 130ft. in width, having a "Belfast" roof in three spans, the centre one being of 60 ft. The two outer spans will be kept down so as to allow direct lighting to the centre. As it is to contain all sorts of machinery, some of great weight, both stationary and at work, the hall will be of somewhat more substantial character than the other buildings, and concrete foundations will be provided for the heavy exhibits. Its chief decorative features will be found at the end facing the Industrial Hall. In the front of the building the main entrance is flanked on either side by an ornamental fountain. Over the main entrance will be a semi-circular ornament, filled in with radiating bars, which at intervals will be fitted at the terminals with coloured electric light. One of the most striking and novel features of the building will be the main doorway. At each end of the front elevation is a dwarf tower, surmounted by a semi-circular dome, two taller towers supporting the centre. Each of the latter will be crowned by ornamental finials, the central ornamentation, flagstaffs, and the like imparting an exceptionally attractive appearance. The portion of the hall towards the Park is to be treated in a style conforming with that of the Industrial Hall. The architects are Messrs. Walker & Ramsay, of Glasgow. In all nine tenders had been received, seven from firms in Wolverhampton, and two from Birmingham firms. The committee decided to accept the lowest tender—that of Mr. J. Herbert, of Wolverhampton, for 7,297*l.* The erection of the most important of the Exhibition buildings has therefore now been arranged for, the only other building of considerable size to be yet settled being the concert hall, to be erected in the park. Of course there are a number of smaller structures, but they will be agreed upon later. Among these may be included the Japanese pavilion, the executive being in correspondence with the Japanese Government with a view to that nation being officially represented. Then there may be an Oriental section and an Indian section, to say nothing of side shows, cafés, bandstands, &c.

BRITISH FIRE PREVENTION COMMITTEE.—The Executive of the Committee have elected as foreign honorary corresponding members the following members of technical and fire-brigade professions abroad :—M. Bourdon, City Architect, Paris; Herr Reginald Czermack, President Austrian Fire Brigades' Association, Teplitz, Bohemia; Señor Fernandez, Inspector-General of Portuguese Fire Brigades, Oporto; M. Henri, Secretary International Fire Congress and Belgian Fire Brigades' Federation, Brussels; Herr von der Hude, President Architects' Association, Berlin; Herr A. Jaffe, Architect of International Fire Exhibition, Berlin; Count Kamarowsky, President International Fire Congress, Orel, Russia; Herr Kitner, Vice-President Royal Institute of Russian Architects, St. Petersburg; Herr von Lundt, Chief Officer Fire Brigade, Odessa; M. G. de Marie, President Luxembourg Fire Brigades' Association, Luxembourg; Herr Meyer, Chief Officer Fire Brigade, Copenhagen; Herr Ohlshausen, Superintendent of Buildings, Hamburg; and M. le Chevalier Papini, Chief Officer Fire Brigade, Milan.

EDUCATIONAL PROSPECTUSES.—The Principal of the Northern Polytechnic, in sending us a copy of the Prospectus for the session 1901-2, draws attention to the recent development of the day-school work. The institution has now four day schools open to boys and girls, one specialising in science, the other in technology (building trades especially); the other two are in subjects out of our province. In the engineering and metal trades and in the building trades department there appears to be every provision made for a complete technical training.——The Birkbeck Literary and Scientific Institution, which has just commenced its winter term, sends us the annual Prospectus and Report. As is well known, the Institution provides in its curriculum for the study of a great variety of subjects in literature, mental and moral science, and physics. During the recess improvements have been made in the arrangements of the building, partly as the result of a special donation of two thousand guineas from Mr. Francis Ravenscroft. The additions comprise a new reading-room, a magazine-room and study, and a tea-room; while in the basement space has been gained for a large metallurgical laboratory. A further increase in the appointments of the Institution has been made by the aid of an equipment grant from the County Council. This includes useful additions to the scientific apparatus in the departments of physics, chemistry, and mechanics, appliances for the art school, and models for building construction; and the departments of botany, geology, and zoology are now (thanks to this assistance) placed on a very efficient footing, and students will pursue their studies of these sciences under highly favourable conditions. Among the special subjects are included building construction, quantity surveying, and drawing.——The Glasgow and West of Scotland Technical College sends us its annual Prospectus and Report. The college occupies buildings scattered over a wide area and consequently difficult of inspection, and advantage has been taken of the Glasgow Exhibition to prepare an exhibit representative of the several departments, the collection being composed entirely of work done in the ordinary course of last session. At present the number of students has been increased to the utmost capacity of the buildings, and the curriculum has been extended in several directions. The subjects taught include natural philosophy, chemistry, technical chemistry, mechanics, and applied mathematics, machine design, steam and steam engines, civil engineering, electrical engineering, architecture, mining and geology, &c., &c.

A NEW GAS FIRE.—The Clumond Gas Radiator is a novel description of gas fire which is now being placed on the market by the Kern Burner Company. The fire is described in the current chapter of "The Student's Column." The company have just opened showrooms at Kern Buildings, Gravel-lane, Southwark, S.E., where fires or "radiators" of various sizes and designs may be seen. We have seen the new fire in action and strongly recommend intending purchasers of gas fires to inspect this novelty before investing in the old forms of gas fire. We should not, however, recommend the use of any of the radiators having less than ten tubes and a nominal consumption of 20 cubic ft. per hour, except for rooms of remarkably small area.

BRICKWORKS IN THE MARKET.—At the London Auction Mart, Tokenhouse-yard, on Wednesday, October 9, Messrs. Fuller, Horsey, Sons, & Cassell submitted for sale the freehold property known as the Eye Fletton Brickworks, situate at Eye Green, near Peterborough. The property, it was explained, had a total area of about 9½ acres, the whole of the land containing superior Fletton brick earth extending to a very considereble depth, the quantity being for all practical purposes inexhaustible. There was an abundant supply of water derived from a reservoir on the property. The buildings were of substantial construction and well arranged for the purposes of the business. The plant and machinery were entirely modern and capable of an output of about 200,000 bricks per week. The property was absolutely freehold, there being no tithe-rent charge, land-tax, or royalties payable. The only drawback to the works was the absence of a railway siding, but the railway company had agreed to construct one at a charge of 10 per cent. yearly interest on the necessary outlay. The bidding was started at 2,000*l.*, and did not advance beyond 2,450*l.* The auctioneer said he could not sell at that price, and the property was accordingly withdrawn, private offers being invited.

THE ARTHUR CATES BEQUEST OF BOOKS.—The late Mr. Arthur Cates bequeathed his architectural library jointly to the Institute, to the Architectural Association, and to the Surveyors' Institution, the selection of volumes to be at the discretion of his executors. The bequest was, however, subject to Mrs. Cates' enjoyment of it during her life. Mrs. Cates has expressed the wish that the books should fulfil the useful purpose of the testator without delay; and the Architectural Association has now received some 130 works (besides many pamphlets). Among them are such books as "Monuments Anciens et Modernes," by Jules Gailhabaud; "Motifs Historiques," by César Daly; Neale's "Abbey Church of St. Albans;" Johnson's "Specimens of Early French Architecture;" Wicke's "Spires and Towers of Mediæval Churches of England;" "Fifteenth Century Italian Ornament," by Sydney Vacher; Burges' "Architectural Drawings;" Sharpe's "Architectural Parallels;" Richardson's "Architecture of England;" Durand's "Parallèle des Edifices;" "Architecture Civile et Domestique," by Verdier and Cattois; "Entretiens sur L'Architecture," by Viollet-le-Duc, as well as his great work the "Dictionnaire de L'Architecture Française" (11 volumes).

LEGAL.

REGENT-STREET BUILDING DISPUTE.

THE case of Mappin *v.* Liberty & Co. came before the Lord Chief Justice of England, sitting as Vacation Judge, on the 9th inst., on an application by the plaintiffs for an interlocutory injunction to restrain the defendants, in completing a vault or cellars, from tunnelling under the subsoil of Regent-street to the injury of the plaintiffs. The plaintiffs alternately alleged that the defendants, in constructing the work in question below their foundations, had not complied with the provisions of the London Building Act, 1894.

Mr. Bramwell Davis, K.C. and Mr. Pollock appeared for the plaintiffs; and Mr. Younger, K.C. and Mr. Rolt for the defendants.

At the conclusion of the arguments of counsel his Lordship in giving judgment said that upon the question of title the plaintiffs had not made out a strong *prima facie* case sufficient to justify him in stopping the defendants from carrying out the works in question. With regard to the point under the London Building Act, he did not think there was sufficient evidence to justify him in granting the injunction asked. In these circumstances the motion would stand till the trial, the costs to be costs in the action.

TORQUAY BUILDING DISPUTE.

THE case of the Torquay Hotel Company, Limited, *v.* Bell came before the Lord Chief Justice of England, sitting as Vacation Judge, on the 9th inst., on a motion by the plaintiff Company for an interim injunction to restrain the defendant until the trial from the erection of certain buildings.

Upon the case being called on, Mr. Edward Ford, for the defendant, stated that his client had, he thought, pulled down all that the plaintiffs could possibly object to, and he would undertake not to rebuild that portion, except that he would have to put slates on to cover in that portion of the building which was left.

Mr. Bramwell Davis, K.C., for the plaintiffs, said he could not agree that the defendant had taken down everything that the plaintiffs could object to.

His Lordship: It is better that the case should stand over till it is ripe to be heard.

Mr. Davis replied that he would not offer any objection to the motion standing over if the defendant would undertake in the terms of the notice of motion until the hearing.

His Lordship (to Mr. Ford): You say you think the defendant has pulled down what the plaintiffs can object to, and you will undertake not to rebuild that except to put slates on to cover in what is left.

Mr. Ford: Yes.

His Lordship: I think that is reasonable. The motion will stand over till the second motion day next sittings.

Order accordingly.

BUILDING DISPUTE AT EAST SHEEN.

THE case of the East Sheen Preservation Society *v.* The Urban District Council of Barnes came before the Lord Chief Justice of England, sitting as Vacation Judge, on the 9th inst., on an application by the plaintiffs to continue an injunction which his Lordship granted *ex parte* on the 5th inst.

When the case was called on his Lordship stated that he remembered the facts. The plaintiffs wished to prevent buildings at East Sheen from being used as a smallpox hospital.

Mr. St. John said he represented the defendants, and he asked that the motion might stand over in order to enable his clients to answer affidavits filed by the plaintiffs in support of the motion.

His Lordship (to Mr. St. John): You must not go on building in the mean time.

Mr. St. John: The building is finished, and I have not the least intention of going on further.

His Lordship: You must not use the place as a smallpox hospital.

Mr. St. John: The notice of motion does not say anything about that.

His Lordship (referring to the notice of motion) said he saw that the plaintiffs' application was that the defendants had not the right to build on the common.

Counsel for the plaintiffs said that if the motion stood over, he should ask that the defendants should undertake not to use the place as a smallpox hospital.

His Lordship: I have nothing to do with that on this motion. The case will stand over till the second motion day next sittings.

Order accordingly.

RECENT PATENTS:

ABSTRACTS OF PATENTED INVENTIONS.

10,506.—A DRILL FOR DEEP BORING: *J. T. Wood, R. Wood and A. H. Wood.*—For vertical boring, a percussive and rotatory motion is imparted by either power or the hand, to a twisted drill, which is furnished with a point of hardened steel. As the hole becomes deeper, lengths of plain rod, having screwed or other socket joints, are added.

10,519.—WINDOW CASEMENTS: *E. Goddard.*—The casement is mounted upon pivots at its front, which are cast in one piece with channel bars that are affixed to the frame; sockets or eyes being also cast upon channel bars, which are secured to the casement-rails. When the casement is shut, the overlapping ribs of the channel bars will form a weather-tight joint, whilst a gutter or channel is drained through the sill by means of inclined apertures. In another form of the contrivance (which can be used for pivoted windows and fanlights) pivots and eyes are cast upon a window frame and casement made of metal.

10,522.—A MACHINE FOR DRILLING WOOD: *H. S. Broom and J. T. Wade.*—Drill spindles with pinions that gear with an inner gear-wheel upon a spindle are mounted upon a barrel, which is adjusted anglewise in a bearing and is to be locked with a set screw; the thrust of the spindles is taken by a disc upon the gear-wheel, which runs in a covered oil-bath; through the engagement of the set screw with holes in the barrel, the drills, which should be disposed in pairs, can be placed either vertically or horizontally, or at any intermediate angle with the work table.

10,527.—AN ANEMOMETER FOR USE IN COAL MINES: *J. Thompson.*—A cup in a chamber which contains petroleum oil or some other non-conducting liquid, sustains the lower bearing of the vertical spindle that is turned by hemispherical cups; a flange at the upper end of the spindle drops into an oil-cup in the steadying bearing; with the rotation of the spindle a cam will make and break contact alternately with a spring upon an insulating-block, whereby will be closed and opened an electrical current between two terminals on the outside of a sealed casing; the velocity of rotation is regulated with a bell, &c., in the circuit, so that one can calculate the velocity of the current and the amount of air per unit of time.

10,549.—A LIFT-VALVE: *N. N. Shaw.*—A recess in the valve takes an enlargement of the lower end of the quick-threaded spindle for which the cover serves for a nut. Another nut secures a reversible and renewable valve-disc to the valve, which has for its guide the vertical extension of the cover, whilst the amount of opening of the valve is indicated by means of a pointer upon the hand-wheel, a single turn of which completely opens the valve.

10,564.—TUBES FOR HOLDING PAINTS, OILS, LUBRICANTS, &C.: *Gerdom Kellogg Company.*—The containers or tubes are fashioned with corrugations and have winders or keys; they are made of thin metal strips corrugated centrically and having serrated ends for their pierced spouts or caps, the strips being soldered or folded into tubes.

10,595.—TREADS FOR FOOT-WAYS, STAIRS, &C.: *C. H. Wilkinson.*—These are made of a sheet of some soft metal or of leather, indiarubber, skin, or hide, with a backing of indiarubber, fibre, felt, or some similar material, secured with metallic wires which are set either straight or slant-wise so that their points shall be flush or may be ground flush with the surface.

10,606.—A FUSE-BOX (ELECTRICAL): *A. D. Smith.*—The fuse-box is devised for use in distributing to general consumers from one set of service cables. In the case of two circuits an insulating block having channels which are separated with ridges is fitted on to a box which has a glazed lid. The main is connected to a 'bus bar provided with terminals for the isolated fuse wires. There are openings for the conductors in the upper part of the box. Two 'bus bars are supplied for concentrical or similar mains.

10,609.—A DOOR-CLOSING APPLIANCE: *S. Hill.*—The appliance comprises a spring that shuts the door and a pneumatical check that will prevent it from being slammed; a lever is pivoted on to the door-frame and an air cylinder is affixed to the door, two chains join the piston to a drum, one of them being attached to the inner or piston-end, and the other to the outer end, of the piston-rod, to the end of the lever on the door-frame is pivoted a lever which is secured to the axis of the drum; the opening of the door draws in air by a piston through a valve, but as the door is being closed through the working of a spiral spring the escape of the air behind the piston through a small vent-hole beneath a screw controls its movements; the specification extends to other rearrangements of the cylinder and links.

10,637.—ELECTRICAL RESISTANCES: *A. H. Mayes.*—Conducting plates, between which is placed some pulverulent resistant material are secured within a non-conducting box beneath non-conducting pressure plates, grooves (filled with mica or asbestos paper packing) in the box take the corrugated copper conducting plates, and it has lugs for its lid and holes for the binding-screws. The pressure-plates and the box and its lid may be made entirely of slate or earthenware, or of metal covered with an insulating material. Brackets upon the back of a switch-board will carry the box, the terminals being joined to the contact-studs of a common switch.

10,680.—A FASTENING FOR GATES: *H. Swiers.*—An automatic fastening or catch is formed with a loop upon a bar, which is passed through slots in a plate upon the gatepost. Upon the under side of the plate is a spring-catch that will, when the gate is open, keep the loop raised. As the gate is being shut it works a push upon the spring, and so disengages the loop from the catch, whereupon the loop will drop down over the head of the gate and so fasten it; or a crook or bent piece may be employed instead of a loop, having a handle and being set for engagement with one of the gate-bars.

10,714.—CONFIGURATION OF DRAIN-PIPES, GULLIES, CHANNELS, &C.: *D. Read.*—The pipes, chutes, interceptors, and so on are fashioned with an egg-shaped section, having a semicircular curve above and an elliptical curve below, and squared supports, with jointing sockets oval in section.

10,716.—PLIERS: *H. A. Deiters & E. L. Bill.*—The pin on to which one jaw is pivoted may be varied as to its position with respect to the other jaw by the turning of an eccentric in the latter jaw, and securing it by a plate with a pin that will enter into a series of holes. The eccentric, which may be either stepped or have lugs that fit a groove in the latter jaw, will enable one to apply the jaws as may be required on to the work.

10,730.—MEANS OF ESCAPE FROM FIRE: *C. R. Harris.*—The inventor devises a rope ladder that can be wound upon a reel and stowed in a case beneath the window sill, it is to be liberated for use by pressing a button that disengages the catch of the door of the case or box, a spring opens the door and the reel will then roll down the bottom, which is sloped, of the box.

10,752.—A CRANE FOR USE BY BUILDERS AND OTHERS: *J. Davie and J. Weir.*—Spans which are passed around pulley-blocks and are wound in opposed directions upon a drum serve to slew the derrick about its support upon a post or mast, the blocks are attached to projections from the head of the post, and worm-gearing turns the drum.

10,763.—SLIDING GATEWAYS, PARTITIONS, &C.: *I. Wishart.*—The sections are hinged on the outside and inside, alternately, so that one can cause them to slide and fold together. Every other section has wheels or rollers at its base with middle flanges that move between guide rails, and rollers at the top, similarly guided; the top rollers have roller bearings, and the bottom wheels revolve upon roller bearings on spindles carried by swivelling spheres or forks moving within ball-shaped casings.

10,778.—ARTIFICIAL STONE GOODS: *L. Schreyer.*—For casting goods made of artificial stone or a marble composition the inventor discards the customary polished glass moulds for sheet metal moulds, which he lines internally with a thin layer of a leaden silicate and (it may be) a vitreous enamel.

10,788.—MAKING OF WIRE FENCING: *W. McCloskey and J. Kay.*—For retaining the horizontal wires in their places whilst one weaves them with the vertical wires is used a spacing-bar. The wires will rest upon cranked pins of the spacing-bar, a pivoted lever or jaw held with a catch at the top of the bar grips the top wire together with the end of the vertical wire that is being interwoven, a shoulder upon the lower end of the bar lies upon the lowest horizontal wire.

10,865.—TILES FOR ROOFS, WALL-LININGS, &C: *P. Sohège.*—The tiles or sheets are composed of an admixture of tan waste or bark, waste hemp, gelatinous size, alum, resinous soap, sand, and pulverised pumice-stone; an addition of 1 per cent. of tannic acid will precipitate the gelatine and serve for an antiseptic. After having been subjected to a high pressure the goods are dried, and then made waterproof with a solution of stearic acid 5 parts and pine resin 12 parts, heated to 100 deg. C.

10,895.—SPIGOT-AND-SOCKET JOINTS: *R. Ewing.*—An annular shoulder is fashioned upon the socket, with its raised portion, saddle, or rest at the lowest part in order to ensure an even and smooth invert; if liquid cement is used the grouting material is poured through holes in the shoulder, the cement being held by an annular shoulder (of which the lower part constitutes a saddle) formed around the rim of the socket.

10,921.—TREATMENT OF SEWAGE: *C. Lehmann and F. Neumeyer.*—The sewage is conveyed into an air-tight receiver which is joined with a bent pipe to a vessel which (together with the receiver) is connected to a tank by pipes for the passage of the evolved gases, for which an ultimate escape is provided; the tank is partly filled with glycerine. Before the treatment is begun, the air-tight container is filled with water. There are pipes for emptying the vessels, and for indicating when the sludge has reached the highest levels.

MEETINGS.

FRIDAY, OCTOBER 11.

Architectural Association.—Annual general meeting; Address by the President, Mr. W. H. Seth-Smith, and Distribution of Prizes, Medals, and Certificates. 7.30 p.m.

Glasgow Architectural Craftsmen's Society.—Opening Address by the President, Mr. J. M'Kissack.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. W. Spinks on "Calculations, Measurements, and Plans and Sections." 7 p.m.

SATURDAY, OCTOBER 12.

British Institute of Certified Carpenters.—Visit to Lloyd's Registry Offices, Fenchurch-street, E.C. 3 p.m.

Northern Architectural Association.—An excursion meeting. Members to assemble at the Newcastle Breweries Offices, Haymarket, at 3 p.m.; after inspecting these buildings, the Electric Power Station will be visited.

MONDAY, OCTOBER 14.

Clerks of Works Association.—Monthly meeting, Carpenters' Hall. 7.30 p.m.

TUESDAY, OCTOBER 15.

Architectural Association.—Preliminary meeting of the School of Design. Addresses will be delivered by Mr. J. Macvicar Anderson and Mr. H. H. Statham. 7 p.m.

WEDNESDAY, OCTOBER 16.

Builders' Foremen and Clerks of Works' Institution.—Quarterly meeting of the members. 8 p.m.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. W. Spinks on "Sanitary Appliances." 7 p.m.

THURSDAY, OCTOBER 17.

Carpenters' Company, London Wall (Lectures on Sanitary Building Construction).—Mr. Mark H. Judge on "Sanitary Architecture." 7.30 p.m.

Sanitary Institute (Lectures for Sanitary Officers).—Mr. W. Spinks on "House Drainage." 7 p.m.

FRIDAY, OCTOBER 18.

Architectural Association Discussion Section.—Mr. H. G. Collins on "Stables and Stable Fittings." 7.30 p.m.

PRICES CURRENT OF MATERIALS.

***** Our aim in this list is to give, as far as possible, the *average* prices of materials, not necessarily the lowest. Quality and quantity obviously affect prices—a fact which should be remembered by those who make use of this information.**

BRICKS, &c.

	£ s. d.		
Hard Stocks	1 14 0	per 1,000	alongside, in river.
Rough Stocks and Grizzles	1 11 0	,,	,, ,,
Facing Stocks	2 12 0	,,	,, ,,
Shippers	2 8 0	,,	,, ,,
Flettons	1 8 6	,,	at railway depôt.
Red Wire Cuts	1 14 6	,,	,, ,,
Best Fareham Red	3 11 0	,,	,, ,,
Best Red pressed Ruabon Facing.	5 5 0	,,	,, ,,
Best Blue Pressed Staffordshire	4 4 6	,,	,, ,,
Do., Bullnose	4 9 0	,,	,, ,,
Best Stourbridge Fire Bricks	4 2 6	,,	,, ,,
GLAZED BRICKS			
Best White and Ivory Glazed Stretchers	13 0 0	,,	,, ,,
Headers	12 0 0	,,	,, ,,
Quoins, Bullnose, and Flats	17 0 0	,,	,, ,,
Double Stretchers	19 0 0	,,	,, ,,
Double Headers	16 0 0	,,	,, ,,
One Side and two Ends	19 0 0	,,	,, ,,
Two Sides and one End	20 0 0	,,	,, ,,
Splays, Chamfered, Squints	20 0 0	,,	,, ,,
Best Dipped Salt Glazed Stretchers and Headers	12 0 0	,,	,, ,,
Quoins, Bullnose, and Flats	14 0 0	,,	,, ,,
Double Stretchers	15 0 0	,,	,, ,,
Double Headers	14 0 0	,,	,, ,,
One Side and two Ends	15 0 0	,,	,, ,,
Two Sides and one End	15 0 0	,,	,, ,,
Splays, Chamfered, Squints	14 0 0	,,	,, ,,
Seconds Quality White and Dipped Salt Glazed	2 0 0	,,	less than best.

	s. d.		
Thames and Pit Sand	7 3	per yard,	delivered.
Thames Ballast	6 0	,,	,,
Best Portland Cement	34 6	per ton,	delivered.
Best Ground Blue Lias Lime	25 6	,,	,,

NOTE.—The cement or lime is exclusive of the ordinary charge for sacks.

Grey Stone Lime ..... 12s. 6d. per yard, delivered.
Stourbridge Fire-clay in sacks, 28s. od. per ton at rly. dpt.

STONE.

	s. d.		
Ancaster in blocks	2 0	per ft. cube,	deld. rly. depôt.
Bath ,,	1 7	,,	,,
Farleigh Down Bath	1 8	,,	,,
Beer in blocks	1 6½	,,	,,
Grinshill ,,	1 10	,,	,,
Brown Portland in blocks	2 2	,,	,,
Darley Dale in blocks	2 1½	,,	,,
Red Corsehill ,,	2 5	,,	,,
Red Mansfield ,,	2 4½	,,	,,
Hard York in blocks	2 10	,,	,,
Hard York 6 in. sawn both sides landings, to sizes (under 40 ft. sup.)	2 8	per ft. super	at rly. depôt
,, ,, 6 in. Rubbed Ditto	3 0	,,	,,
,, ,, 3 in. sawn both sides slabs (random sizes)	1 3	,,	,,
,, ,, 2 in. self-faced Ditto	0 9½	,,	,,
Hopton Wood (Hard Bed) in blocks	2 3	per ft. cube,	deld. rly. depôt
,, ,, 6-in sawn both sides landings	2 7	per ft. super.	deld. rly. depôt.
,, ,, 3-in. do.	1 2½	,,	,,

[See also page 327.

COMPETITIONS, CONTRACTS, AND PUBLIC APPOINTMENTS.

(For some Contracts, &c., still open, but not included in this List, see previous issues.)

COMPETITIONS.

Nature of Work.	By whom Advertised.	Premiums.	Designs to be delivered
*Isolation Hospital	Bexhill U.D.C.	25*l.*	Nov. 23
*Isolation Hospital	Burslem Corporation	100*l.* and 50*l.*	Dec. 30
*Proposed Cathedral (Liverpool)	The Committee	Not stated	Jan. 1
Schools, Blyth	Cowpen (N'umbrlnd) U.D. Sch. Bd.	Not stated	No date

CONTRACTS.

Nature of Work or Materials.	By whom Required.	Forms of Tender, &c., Supplied by	Tenders to be delivered
*Making-up Roads	Beckenham U.D.C.	John A. Angell, Surveyor, Beckenham	Oct. 14
Cast-iron Pipes, &c.	East Dereham (Norfolk) U.D.C.	H. E. Stilgoe, Civil Engineer, Town Hall, Dover	Oct. 15
Street Works, Park Mews	Dover Town Council	W. C. Pritchard, Glamorgan Coal Company's Office, Llwynpia	do.
Twelve Houses, Llwynpia, Rhondda Valley	Pontrhondda Building Club	J. E. Parker, C.E., Post Office Chambers, Newcastle-on-Tyne	do.
Sewage Works, Cotherstone, Durham	Startforth R.D.C.	Johnstone Bros., Architects, 30, Lowther-street, Carlisle	do.
Thirteen Houses, Jackson-street, Carlisle	Kendal Town Council	R. H. Lucas, Civil Engineer, Town Hall, Kendal	do.
Walls, &c.	Bournemouth Town Council	F. W. Lacey, Civil Engineer, Town Hall, Bournemouth	do.
Concrete Foundations	Cannock (Staffs) R.D.C.	R. E. W. Berrington, Engineer, Wolverhampton	do.
Water Supply Works	Keighley Corporation	W. H. Hopkinson, Civil Engineer, Town Hall, Keighley	do.
Sewering, Back Hope-place	Wellingborough U.D.C.	E. Sharman, Surveyor, Market-square, Wellingborough	do.
Road Improvement Works, Midland-road	Northfleet (Kent) U.D.C.	S. Honeycombe, Surveyor, The Hill, Northfleet	do.
Wood Paving Works	Midland Railway Company	Milnes & France, Architects, 99, Swan-arcade, Bradford	do.
Rebuilding the Station Inn, Keighley	Belfast Corporation	Sir S. Black, Town Hall, Belfast	do.
Bricks (50,000)	Aberdeen Town Council	W. Dyack, Burgh Surveyor, Town House, Aberdeen	do.
Sewer, Leslie-road	Tottenham U.D.C.	W. H. Prescott, 712, High-road, Tottenham	do.
*Victoria Stone Paving	Croydon R.D.C.	Chart, Son & Reading, Union Bank Chambers, Croydon	Oct. 16
Sewerage Works, Coulsdon	do.	do.	do.
Sewerage Works, Mitcham	Watt's Charity Trustees	J. W. Nash, Surveyor, Rochester	do.
Road Works, Ordnance-place, Chatham	Ebbw Vale U.D.C.	T. Hughes, Council Offices, Ebbw Vale	do.
Road Metal (2,000 tons)	Southend-on-Sea Corporation	A. Fidler, Civil Engineer, Town Hall, Southend-on-Sea	do.
Wood Paving, &c., Alexandra-street	Croydon R.D.C.	R. M. Chart, Surveyor, Town Hall, Croydon	do.
Road Works, Onslow-gardens, &c., Wallington	do.	R. M. Chart, Surveyor, Fell-road, Croydon	do.
Additions to Isolation Hospital, Beddington Corner	Bristol Corporation	T. H. Yabbicom, Civil Engineer, Queen-square, Bristol	do.
Lodge, &c., St. George's Park	Ilkley U.D.C.	The Surveyor, Council Offices, Ilkley	do.
Street Works, Walton-road, &c.	Riccall (Yorks) R.D.C.	E. J. Silcock, Civil Engineer, 10, Park-row, Leeds	do.
Sewage Disposal Works, Barlby	Rev. E. Symonds	H. J. Wright, Architect, 4, Museum-street, Ipswich	do.
Parish Room, Walton, Suffolk	Reading Town Council	J. Bowen, Borough Engineer, Town Hall, Reading	do
Road Works, Dover-street, &c.	Cork International Exhibition Co.	H. A. Cutler, Civil Engineer, Municipal Buildings, Cork	Oct. 17
Restaurant, &c.	Luton Town Council	G. Sell, Town Hall, Luton	do.
Paving Works, Moor-street, &c.	Clay Cross School Board	Rollinson & Son, Architects, 13, Corporation-street, Chesterfield	do.
School, &c.	Mr. Jas. Young	G. Reavell, jun., Architect, Alnwick	do.
House, &c., Sea Houses, North Sunderland	Croydon Corporation	Borough Engineer, Town Hall, Croydon	do.
Earthenware Drain Pipes	Cork County Council	J. J. McCarthy, Court House, Cork	do.
Road Works	Ballymahon (Ireland) Guardians	P. MacGreevy, Workhouse, Ballymahon	do.
Additions to Hospital	Colchester Brewery Co., Ltd.	G. H. Page, Architect, Trinity Chambers, Colchester	do.
Stables, &c., Crown Hotel, Southwold	Hull Corporation	A. E. White, Civil Engineer, Town Hall, Hull	Oct. 18
Underground Convenience, &c., Market Place	Preston Corporation	Borough Engineer, Town Hall, Preston	do.
Cast-iron Water Pipes	Cardiff School Board	E. W. M. Corbett, Architect, Castle-street, Cardiff	do.
Additions to Schools	Newry (Ireland) Guardians	J. Brown, Architect, Newry	Oct. 19
Re-building Workhouse	Neath Main Colliery Co.	J. Cook Rees, Architect, Neath	do.
Six Houses, Brynoch	Gelligaer School Board	James & Morgan, Architects, Charles-street Chambers, Cardiff	do.
Schools, Pontlottyn	Coventry Corporation	J. E. Swindlehurst, Civil Engineer, St. Mary's Hall, Coventry	do.
Cast-iron Pipes (21 tons)	Londonderry Guardians	M. A. Robinson, Civil Engineer, Richmond-street, Londonderry	do.
Drainage Works at Hospital	Metropolitan Borough of Stepney	Borough Engineer, 15, Great Alie-street, Whitechapel, E.	do.
*Barging Away and Disposal of Rubbish	Middleton Electric Traction Co.	Secretary, Donington House, Norfolk-street, Strand, W.C.	Oct. 21
*Car Shed and Workshops	Hertfordshire County Council	County Surveyor, 41, Parliament-street, S.W.	do.
Paving, Kerbing, &c., Hoddesdon	Radcliffe (Lancs) U.D.C.	W. L. Rothwell, Surveyor, Council Offices, Radcliffe	do.
Retaining Wall, &c.	Great Western Railway Co.	G. K. Mills, Paddington Station, W.	do.
Cement, Pipes, &c.	Bramley Guardians	P. Robinson, Architect, 72, Albion-street, Leeds	do.
Additions to Board Room Offices, &c., Armley	St. Columb Minor School Board	J. Pearce, 1, Lehenver-villas, Newquay	do.
Schools, Newquay, Cornwall	Ramsgate Corporation	W. A. M. Valon, Engineer, Town Hall, Ramsgate	do.
Water Pipes	Sheerness Town Council	T. F. Berry, Surveyor, Trinity-road, Sheerness	do.
Road Metal, &c.	Technical Instruction Committee	W. C. Field, Borough Surveyor, Town Hall, Eastbourne	do.
Public Library, &c., Eastbourne	Clyde Navigation Trustees	W. M. Alston, Engineer, 16, Robertson-street, Glasgow	do.
Street Works, Brand-street, Glasgow	Bromley U.D.C.	Surveyor, District Council Offices, Bromley, Kent	Oct. 22
*Roadmaking Works	West Ham Council	Borough Engineer, Town Hall, West Ham, E	do.
*Artizans' Dwellings, Plaistow	Willesden District Council	O. Claude Robson, Engineer, Dyne-road, Kilburn	do.
*Additions to Hospital	Hammersmith Council	Borough Surveyor, Town Hall, Hammersmith	Oct. 23
*Open Shed, Steel Joists and Concrete Roof	Cambridgeshire, &c., Asylum	A. P. MacAlister, Architect, 20, St. Andrew's-street, Cambridge	Oct. 24
*Additional Wing to Asylum	Commissioners of H.M. Works, &c.	H.M. Office of Works, Storey's Gate, S.W.	Oct. 25
*Enlargement of Head Post Office, York	West Hartlepool Corporation	J. W. Brown, Borough Engineer, West Hartlepool	do.
Sewerage Works (Contract No. 3)	Commissioners of H.M. Works, &c.	Secretary, H.M. Office of Works, Storey's Gate, S.W.	do.
*Enlargement of Head Post Office, Derby	Newhaven (Sussex) U.D.C.	F. J. Rayner, Town Surveyor, Newhaven	Oct. 28
Sewers, &c.	Gosport and Alverstoke U.D.C.	R. St. George Moore, Civil Engineer, 17, Victoria-street, S.W.	do.
*Drainage Works	British Electric Traction Co., Ltd.	Chief Engineer, Donington House, Norfolk-street, W.C.	do.
*Car Shed, Workshops and Offices, Northfleet	Commissioners of H.M. Works	H. Tanner, H.M. Office of Works	Oct. 29
*Sub-District Post Office, West Kensington	Bethnal Green Guardians	Steward's Office, Bishop's-road, Bethnal Green, N.E.	do.
*Steam Disinfector, &c.	Brentford Union	Clerk to Guardians, Union Offices, Isleworth, W.	do.
*Iron Escape Staircase	Middlesex County Council	County Engineer, Guildhall, Westminster	Nov. 1
*Artificial Stone, Granite Kerbing, &c.	Chiswick U.D.C.	A. Ramsden, Surveyor, Town Hall, Chiswick	Nov. 6
*Isolation Hospital	Commissioners of H.M. Works, &c.	Secretary, H.M. Office of Works, Storey's Gate, S.W.	Nov. 12
*New Public Offices, Westminster	Manchester Corporation	— Harrison, 102, Bankside-street, Roundhay-road, Leeds	No date
Eight Scullery Houses	Morley Main Fireclay Works	Borough Surveyor, Town Hall, Manchester	do.
Setts, &c.	Mr. R. Simmonds	W. Ackroyd & Bros., Limited, Morley	do.
Kilns, Chimneys, &c., Morley, near Leeds	Mr. Jos. Whitworth	Davidson & Garden, 12, Dee-street, Aberdeen	do.
Water Supply Works, Dyce Manse, Aberdeen		Friend & Lloyd, Architects, Grosvenor-road, Aldershot	do.
Road Works, Elm Farm Estate, Aldershot		H. E. & A. Bown, Architects, James-street, Harrogate	do.
Stabling, &c., Ship Inn, Harrogate			

PUBLIC APPOINTMENTS.

Nature of Appointment.	By whom Advertised.	Salary.	Application to be in
*Surveyor and Engineer	Bilston U.D.C.	200*l.*	Oct. 19
*Assistant Waterworks Inspector	Colombo Waterworks	2,400 Rupees per annum, &c.	do.
*Inspector of Nuisances	Aylesbury R.D.C.	175*l.*	Oct. 23
*Temporary Architectural Assistant	Wolverhampton Corporation	3*l.* 3s. per week	No date
*Land Surveyors (several)	Land Registry	140*l.* per annum	do.
*Assistant Lecturer, &c., in Building Construction	Wandsworth Technical Institute	Not stated	do.
*Carpenter	Lagos Government	200*l.*	do.

Those marked with an asterisk (*) are advertised in this Number. *Competitions, p.* iv. *Contracts, pp.* iv. vi. viii. x. *&* xxiv. *Public Appointments, pp.* xxi. *&* xxiv.

PRICES CURRENT (*Continued*).

SLATES.

in.	in.		£	s.	d.	
20×10	best blue Bangor		11	5	0	per 1000 of 1200 at rly. dep.
,,	best seconds	,,	10	15	0	,, ,,
16× 8	best	,,	6	2	6	,, ,,
20×10	best blue Portmadoc		10	18	0	,, ,,
16× 8	best blue Portmadoc		6	0	0	,, ,,
20×10	best Eureka unfading green		11	2	6	,, ,,
16× 8	,,	,,	6	15	0	,, ,,
20×10	Permanent green		10	0	0	,, ,,
16× 8	,,	,,	5	12	6	,, ,,

TILES.

		s.	d.	
Best plain red roofing tiles		41	6	per 1,000 at rly. depôt
Hip and valley tiles		3	7	per doz. ,, ,,
Best Broseley tiles		48	6	per 1,000 ,, ,,
Hip and valley tiles		4	0	per doz. ,, ,,
Best Ruabon Red, brown or brindled Do. (Edwards)		57	6	per 1,000 ,, ,,
Do. ornamental Do.		60	0	,, ,, ,,
Hip tiles		4	0	per doz. ,, ,,
Valley tiles		3	9	,, ,, ,,
Best Red or Mottled Staffordshire Do. (Peakes)		50	9	per 1,000 ,, ,,
Hip tiles		4	1	per doz. ,, ,,
Valley tiles		3	8	,, ,, ,,

WOOD.

BUILDING WOOD.—YELLOW.

	At per standard. £	s.	d.	£	s.	d.
Deals: best 3 in. by 11 in. and 4 in. by 9 in. and 11 in.	14	10	0	16	10	0
Deals: best 3 by 9	13	10	0	14	10	0
Battens: best 2½ in. by 7 in. and 8 in. and 3 in. by 7 in. and 8 in.	11	0	0	12	0	0
Battens: best 2½ by 6 and 3 by 6	0	10	0	less than 7 in. and 8 in.		
Deals: seconds	1	0	0	less than best		
Battens: seconds	0	10	0	,, ,, ,,		
2 in. by 4 in. and 2 in. by 6 in.	9	0	0	10	10	0
2 in. by 4½ in. and 2 in. by 5 in.	9	0	0	10	0	0
Foreign Sawn Boards— 1 in. by 1½ in. by 1½ in.	0	10	0	more than battens.		
¾ in.	1	0	0	,,		
Fir timber: Best middling Danzig or Memel (average specification)	At per load of 50 ft. 4	10	0	5	0	0
Seconds	4	5	0	4	10	0
Small timber (8 in. to 10 in.)	3	12	6	3	15	0
Swedish balks	2	15	0	3	0	0
Pitch pine timber (35 ft. average)	3	0	0	3	10	0

JOINERS' WOOD.

	At per standard.					
White Sea: First yellow deals, 3 in. by 11 in.	25	0	0	26	0	0
3 in. by 9 in.	22	0	0	23	0	0
Battens, 2½ in. and 3 in. by 7 in.	18	0	0	20	0	0
Second yellow deals, 3 in. by 11 in.	20	0	0	21	0	0
,, ,, 3 in. by 9 in.	18	0	0	19	0	0
Battens, 2½ in. and 3 in. by 7 in.	14	0	0	15	0	0
Third yellow deals, 3 in. by 11 in. and 9 in.	14	10	0	15	10	0
Battens, 2½ in. and 3 in. by 7 in.	12	0	0	12	10	0
Petersburg: first yellow deals, 3 in. by 11 in.	22	0	0	23	0	0
Do. 3 in. by 9 in.	19	0	0	20	0	0
Battens	14	0	0	15	0	0
Second yellow deals, 3 in. by 11 in.	15	10	0	16	10	0
Do. 3 in. by 9 in.	14	0	0	15	0	0
Battens	11	10	0	12	0	0
Third yellow deals, 3 in. by 11 in.	13	10	0	14	10	0
Do. 3 in. by 9 in.	13	0	0	13	10	0
Battens	10	10	0	11	10	0
White Sea and Petersburg: First white deals, 3 in. by 11 in.	15	0	0	16	0	0
,, ,, 3 in. by 9 in.	14	0	0	15	0	0
Battens	12	0	0	13	0	0
Second white deals 3 in. by 11 in.	14	0	0	15	0	0
,, ,, 3 in. by 9 in.	13	0	0	14	0	0
,, ,, battens	10	10	0	11	10	0
Pitch pine: deals	16	0	0	18	0	0
Under 2 in. thick extra	0	10	0	1	0	0
Yellow Pine— First, regular sizes	30	0	0	33	0	0
Broads (12 in. and up)	2	0	0	more.		
Oddments	22	0	0	24	0	0
Seconds, regular sizes	24	10	0	26	10	0
Yellow Pine Oddments	20	0	0	22	0	0
Kauri Pine—Planks, per ft. cube	0	3	6	0	4	6
Danzig and Stettin Oak Logs— Large, per ft. cube	0	2	6	0	3	0
Small ,, ,,	0	2	3	0	2	6
Wainscot Oak Logs, per ft. cube	0	5	0	0	5	6
Dry Wainscot Oak, per ft. sup. as inch	0	0	8	0	0	7
in. do. do.	0	0	7	-	-	-
Dry Mahogany— Honduras, Tabasco, per ft. sup. as inch	0	0	9	0	0	11
Selected, Figury, per ft. sup. as inch	0	1	6	0	2	0
Dry Walnut, American, per ft. sup. as inch	0	0	10	0	1	0
Teak, per load	16	0	0	20	0	0
American Whitewood Planks— Per ft. cube	0	3	0	0	3	6
Prepared Flooring—	Per square					
1 in. by 7 in. yellow, planed and shot	0	13	6	0	16	6
1 in. by 7 in. yellow, planed and matched	0	13	6	0	17	6
1¼ in. by 7 in. yellow, planed and matched	0	16	0	1	1	0
6 in. at 6d. per square less than 7 in.						
1 in. by 7 in. white, planed and shot	0	11	0	0	13	0
1 in. by 7 in. white, planed and matched	0	11	6	0	13	6
1¼ in. by 7 in. white, planed and matched	0	14	0	0	16	6
6 in. at 6d. per square less than 7 in.						

PRICES CURRENT (*Continued*).

JOISTS, GIRDERS, &c.

	In London, or delivered to Railway Vans, per ton. £	s.	d.	£	s.	d.
Rolled Steel Joists, ordinary sections	6	15	0	7	15	0
Compound Girders ,, ,,	8	15	0	10	0	0
Angles, Tees and Channels, ordinary sections	8	12	6	10	12	6
Flitch Plates	8	15	0	9	10	0
Cast Iron Columns and Stanchions, including ordinary patterns	7	5	0	9	0	0

METALS.

	Per ton, in London. £	s.	d.	£	s.	d.
IRON.— Common Bars	8	0	0	8	10	0
Staffordshire Crown Bars, good merchant quality	8	10	0	9	0	0
Staffordshire "Marked Bars"	10	10	0	-	-	-
Mild Steel Bars	9	0	0	9	10	0
Hoop Iron, basis price	9	5	0	9	15	0
,, ,, galvanised	16	0	0	-	-	-
(* And upwards, according to size and gauge.)						
Sheet Iron, Black.— Ordinary sizes to 20 g.	10	0	0	-	-	-
,, ,, to 24 g.	11	0	0	-	-	-
,, ,, to 26 g.	12	10	0	-	-	-
Sheet Iron, Galvanised, flat, ordinary quality.— Ordinary sizes, 6 ft. by 2 ft. to 3 ft. to 20 g.	12	10	0	-	-	-
,, ,, 22 g. and 24 g.	13	0	0	-	-	-
,, ,, 26 g.	14	0	0	-	-	-
Sheet Iron, galvanised, flat, best quality.— Ordinary sizes to 20 g.	16	10	0	-	-	-
,, ,, 22 g. and 24 g.	17	0	0	-	-	-
,, ,, 26 g.	18	10	0	-	-	-
Galvanised Corrugated Sheets.— Ordinary sizes, 6 ft. to 8 ft. 20 g.	12	10	0	-	-	-
,, ,, 22 g. and 24 g.	13	0	0	-	-	-
,, ,, 26 g.	14	0	0	-	-	-
Best Soft Steel Sheets, 6 ft. by 2 ft. to 3 ft. by 20 g. and thicker	12	5	0	-	-	-
,, ,, 22 g. and 24 g.	13	5	0	-	-	-
,, ,, 26 g.	14	5	0	-	-	-
Cut nails, 3 in. to 6 in. (Under 3 in. usual trade extras.)	9	10	0	10	0	0

LEAD, &c.

	Per ton, in London. £	s.	d.	£	s.	d
LEAD—Sheet, English, 3 lbs. & up.	14	12	6	-	-	-
Pipe in coils	15	2	6	-	-	-
Soil Pipe	17	12	6	-	-	-
ZINC—Sheet— Vieille Montagne ton	24	10	0	-	-	-
Silesian	24	0	0	-	-	-
COPPER— Strong Sheet per lb.	0	1	0½	-	-	-
Thin ,,	0	1	2	-	-	-
Copper nails ,,	0	1	2	-	-	-
BRASS— Strong Sheet ,,	0	0	11	-	-	-
Thin ,,	0	1	1	-	-	-
TIN—English Ingots ,,	0	1	3¼	-	-	-
SOLDER—Plumbers' ,,	0	0	6½	-	-	-
Tinmen's ,,	0	0	8	-	-	-
Blowpipe ,,	0	0	9	-	-	-

ENGLISH SHEET GLASS IN CRATES.

15 oz. thirds	3d.	per ft. delivered.
,, ,, fourths	2¾d.	,, ,,
21 oz. thirds	3¾d.	,, ,,
,, ,, fourths	3½d.	,, ,,
26 oz. thirds	5d.	,, ,,
,, ,, fourths	4¾d.	,, ,,
32 oz. thirds	6d.	,, ,,
,, ,, fourths	5½d.	,, ,,
Fluted sheet, 15 oz.	3½d.	,, ,,
,, ,, 21 ,,	4½d.	,, ,,
½ Hartley's Rolled Plate	2¾d.	,, ,,
⅝ ,, ,, ,,	3¼d.	,, ,,
¾ ,, ,, ,,	3¾d.	,, ,,

OILS, &c.

		£	s.	d.
Raw Linseed Oil in pipes	per gallon	0	2	9
,, ,, ,, in barrels	,,	0	2	10
,, ,, ,, in drums	,,	0	3	0
Boiled ,, ,, in pipes	,,	0	2	11
,, ,, ,, in barrels	,,	0	3	0
,, ,, ,, in drums	,,	0	3	2
Turpentine, in barrels	,,	0	2	3
,, in drums	,,	0	2	5
Genuine Ground English White Lead	per ton	22	0	0
Red Lead, Dry	,,	22	10	0
Best Linseed Oil Putty	per cwt.	0	9	0
Stockholm Tar	per barrel	1	10	0

VARNISHES, &c.

	per gallon. £	s.	d
Fine Elastic Copal Varnish for outside work	0	16	6
Best Elastic Copal Varnish for outside work	1	0	0
Best Elastic Carriage Varnish for outside work	0	16	0
Best Hard Oak Varnish for inside work	0	10	6
Best Extra Hard Church Oak Varnish for inside work	0	10	6
Fine Hard Copal Varnish for inside work	0	16	0
Best Hard Copal Varnish for inside work	1	0	0
Best Hard Carriage Varnish for inside work	0	16	0
Extra Pale Paper Varnish	0	12	0
Best Japan Gold Size	0	10	6
Best Black Japan	0	16	0
Oak and Mahogany Stain	0	9	0
Brunswick Black	0	8	6
Berlin Black	0	16	0
Knotting	0	10	0
Best French and Brush Polish	0	10	0

TO CORRESPONDENTS.

W. E. W. (Below our limit).

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TENDERS.

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* Denotes *accepted.* † Denotes *provisionally accepted.*

BOWNESS-ON-SOLWAY.—For the erection of a concrete wall for the Wigton Rural District Council. Mr. W. Brown, Surveyor, Council Offices, Wigton:—
Ormerod & Son, Close-street, Carlisle* £120

CARDIFF.—For the erection of a residence, Caeran, Cardiff, for Sir E. S. Hill, K.C.B. Mr. G. E. Halliday, architect, Cardiff. Quantities by Mr. John W. Rodger, surveyor, Cardiff:—

Cox	£3,350	F. Couzens & Co.	£2,698
Shepton & Sons	3,086	Britton	2,660
Thomas & Sons	2,895	Cadwallader, Cardiff*	2,600
Evans Bros.	2,887	Bevan	2,431
G. Couzens & Co.	2,737		

CARDIFF.—For additions, &c., to parish church, St. Bride's-super-Ely, for the Rev. J. Sinnett-Jones. Mr. G. E. Halliday, architect, 14, High-street, Cardiff. Quantities by Mr. J. W. Rodger, surveyor, 14, High-street, Cardiff:—

Edward Lewis	£519 8 6	Harris & Davies, Peterston-super-Ely*	£342 5 0
Thomas & Son	479 0 0		
Morris & Thomas	369 0 0		

CARDIFF.—For additions to schools, Maindy, for the Llandaff School Board. Mr. G. E. Halliday, architect, 14, High-street, Cardiff. Quantities by Mr. John W. Rodger, surveyor, Cardiff:—

W. Cox	£1,489 12 10	Cadwallader	£1,290 0 0
Blacker Bros.	1,430 0 0	Thomas & Son	1,280 0 0
Shepton & Son	1,315 0 0	C. C. Dunn	1,230 0 0
Symonds & Couzens & Co., Cardiff*	1,303 18 0		1,187 0 0

CARRICKMINES (Co. Dublin) — For the erection of a dwelling-house and stable in steel and concrete. Messrs. Clare & Ross, architects, 1, West-street, Finsbury-circus, E.C., and Chelmsford:—

R. E. Mellon	£2,144	A. Frazer, Bray, (accepted after amendment)	£1,900

CHELSHAM.—For fitting-up the bar of the Bull Inn. Messrs. Chart, Son, & Reading, architects, Croydon:—

Smith & Sons	£153 10	W. L. Simpson, Camberwell*	£130 0

COULSDON.—For the erection of a house and shop, Lion Green, Coulsdon. Messrs. Chart, Son, & Reading, architects, Croydon:—

E. J. Burnand	£1,200	H. Bacon	£1,056
G. Cheeseman	1,165	Smith & Son	978
V. Cook	1,135	G. Goulder, Croydon*	945

CROYDON.—For the erection of five houses and shops, Lower Church-street, Croydon. Messrs. Chart, Son, & Reading, architects, Croydon:—

Truett & Steel	£3,079 0	Smith & Son	£2,698 0
Bacon, H.	3,034 10	Stewart & Sons	2,612 0
Burnand, E. J.	2,956 0	C. Waller, Croydon†	2,548 0
Goulder, G.	2,875 0		

DEVONPORT.—For alterations to the Foresters' Arms, Duke-street, for Mr. C. Jessep. Mr. Edgar M. Leest, architect, Devonport:—

A. Truscott	£198 7 5	Jenkin & Son	£187 0 0
Healy & Son	192 0 0	Smith & Son	172 15 0
T. May	188 0 0	W. J. Oliver*	158 12 6

HASLEMERE (Surrey).—For the erection of a pair of shops with dwelling-houses. Messrs. Clare & Ross, architects, 1, West-street, Finsbury-circus, London, E.C., and Chelmsford:—
W. Ranson, Haslemere* £1,197

[*See also next page.*

KILLYBEGS (Donegal).—For the erection of a house, for Mrs. M. T. MacGinley. Mr. E. J. Toye, architect, Strand, Londonderry :—

Daniel McCaffery, Strabane, co. Tyrone* .. £1,907

LONDON.—For alterations at the Mitre Hotel, Tooting. Messrs. Chart, Son, & Reading, architects, Croydon :—

Burges & Sons	£750	Keys, Tooting*	£695

LONDON.—For repairs at the Clifton Arms, Norwood. Messrs. Chart, Son, & Reading, architects, Croydon :—

Bacon	£159 0	Akers & Co.	£143 0
Smith & Sons	150 0	Goulder, Croydon*	138 15

MITCHAM.—For alterations and repairs at the White Hart Hotel. Messrs. Chart, Son, & Reading, architects, Croydon :—

J. B. Potter	£855	F. J. Shopland, Sutton*	£725
Jones & Son	848		

MITCHAM.—For the erection of frising shop and hide store at the Eagle Leather Works. Messrs. Chart, Son, & Reading, architects, Croydon :—

Smith & Son	£895	H. Bacon, Thornton Heath*	£655
J. Baker	818		
E. J. Burnand	708	J. Dean	614

NEWMARKET.—For pumping machinery, for the Rural District Council. Mr. F. S. Courtney, engineer, Broad Sanctuary Chambers, Westminster :—

Dixon & Fish	£2,500 15 0	Dodman	£1,419 10 0
Pollock, White, & Co.	2,427 0 0	Renshaw & Co.	1,297 10 0
		Easton & Co.	1,295 0 0
		G. F. Jessop*	1,168 0 0
The Lighting Corporation	1,951 19 7	Fielding & Platt, Worthington	informal
R. Warner	1,535 0 0		
D. Young	1,520 17 0		

NORTHALLERTON.—For the erection of house, cottage, and stabling, Thirsk-road, for Mr. John Walker. Mr. Frank R. White, architect, Northallerton. Quantities by architect :—

Brickwork, Masonry, Carpentry, Joinery, Slating, Plastering, and Painting.

D. Oakley, Northallerton £3,346

Smith's and Ironwork, Plumbing and Glazing.

R. Jameson, Northallerton £615

NOTTINGHAM.—For the erection of a warehouse in rear of Short Hill, Nottingham, for Mr. L. O. Trivett. Mr. Hedley J. Price, architect and surveyor, 24, Low Pavement, Nottingham :—

Kerry & Co.	£2,950	Wm. Maule	£2,849
J. G. Short	2,927	T. & W. Lee	2,835
Dennett & Ingle	2,895	Wm. Crane	2,752
R. Fisher	2,891	Fredk. Messom*	2,690
G. A. Pillatt	2,880		

[All of Nottingham.]

NOTTINGHAM.—For the erection of livery stables, Talbot-street and Wollaton-street, Nottingham, for the Nottingham Real Estate Investment Company, Limited. Mr. Hedley J. Price, architect, 24, Low Pavement, Nottingham :—

J. Wright	£3,520 0	Williamson & Co.	£3,150 0
T. Barlow	3,475 0	Dennett & Ingle	3,145 0
Vickers, Limited	3,474 0	G. A. Pillatt	3,097 0
R. Fisher	3,396 10	A. E. Smith	3,050 0
Cooper & Son	3,290 0	J. G. Short	3,027 0
Hutchinson & Son	3,270 0	W. Maule	3,010 0
F. Messom	3,218 0	Crane, Limited	2,933 0
J. J. Adams	3,150 0	T. Long*	2,890 0

[All of Nottingham.]

READING.—For the erection of a lodge and swimming-bath, for the Corporation. Mr. J. Bowen, C.E., Town Hall, Reading :—

Swimming Bath.

H. W. Godwin	£7,399 0 0	McCarthy E. Fitt	£5,655 0 0
Collier & Catley	6,550 0 0	H. Hill, Maidenhead*	4,627 0 0
Pattinson & Sons	6,169 0 0		

Caretaker's Lodge and Sanitary Conveniences.

H. Searle	£1,397 0 0	Collier & Catley	£1,294 11 0
J. Dixon	1,377 12 10	Lewis & Bros.	1,240 0 0
H. W. Godwin	1,342 0 0	McCarthy E. Fitt, Reading*	1,234 0 0
Pattinson & Sons	1,301 0 0		

SOUTHBOROUGH (Kent).—For the erection of a chapel and cottage at Cemetery, for the Urban District Council. Mr. William Harmer, surveyor, 137, London-road, Southborough. Quantities by surveyor :—

H. Whibley	£1,900 0 0	Beale & Son	£1,220 0 0
C. J. Gallard	1,492 0 0	J. Marshall	1,205 0 0
Gam & Co.	1,380 0 0	Crates & Son	1,179 0 0
Martin & Co.	1,300 0 0	Punnett & Son	1,175 0 0
K. C. Jarvis	1,240 0 0	T. Potter, South-borough*	1,172 8 10
Tapner & Co.	1,235 0 0		
Leney & Son	1,228 0 0		

SUNDRIDGE.—For repairs at the White Horse Inn. Messrs. Chart, Son, & Reading, architects, Croydon :—

Aves	£272 5	Canfield	£211 15
Hodges	229 15	Goulder, Croydon*	117 10

WARE.—For the erection in steel and concrete of a gardener's cottage. Messrs. Clare & Ross, architects, 1, West-street, Finsbury-circus, E.C., and Chelmsford :—

Norris & Son	£656	F. Johnson	£430
F. Hitch	645	Clare Bros., Stratford*	397
Foster & Dicksee	490		

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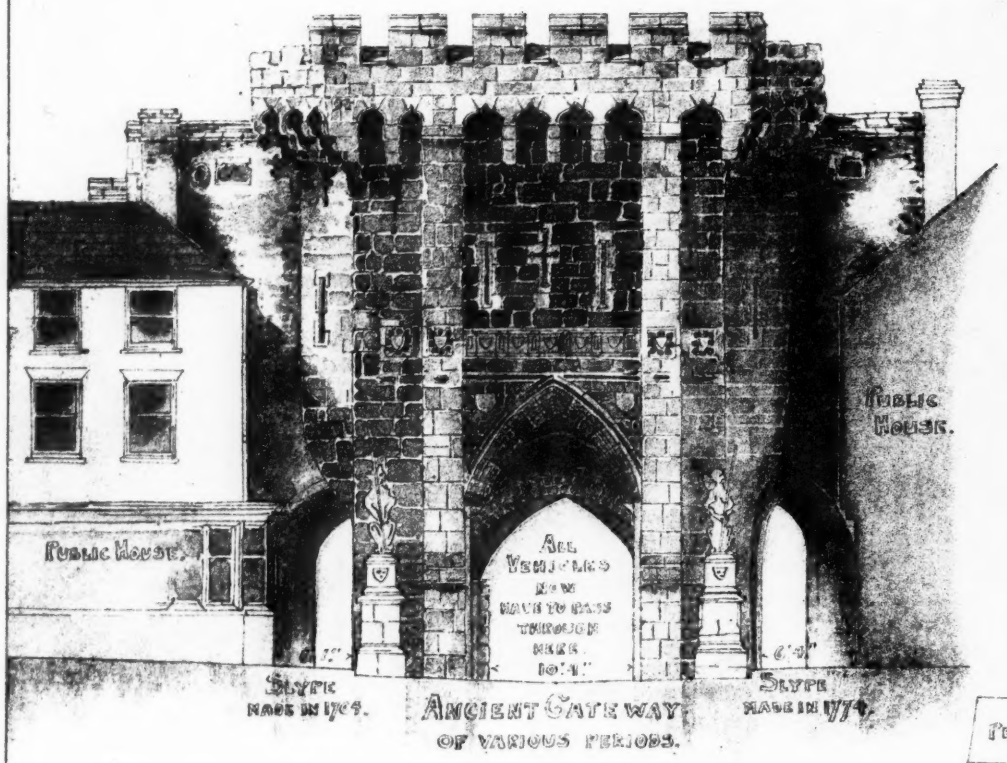
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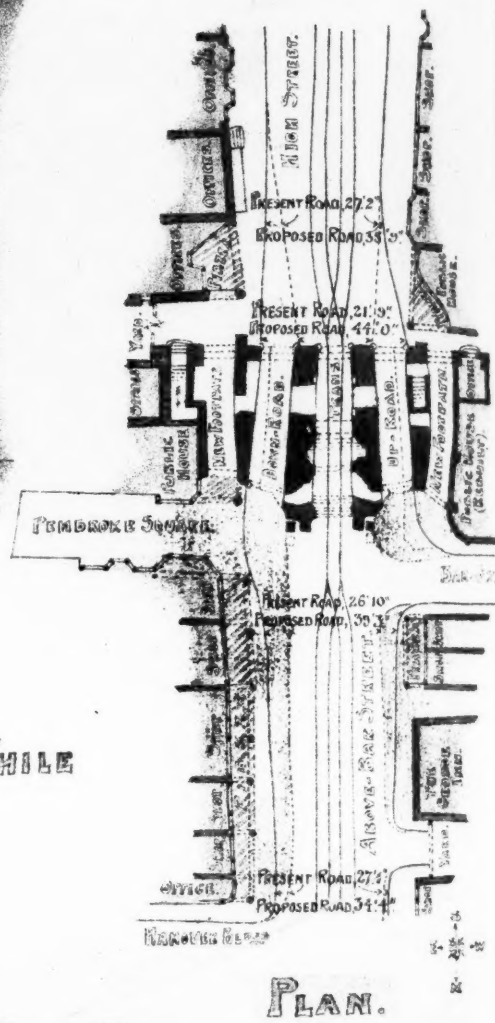
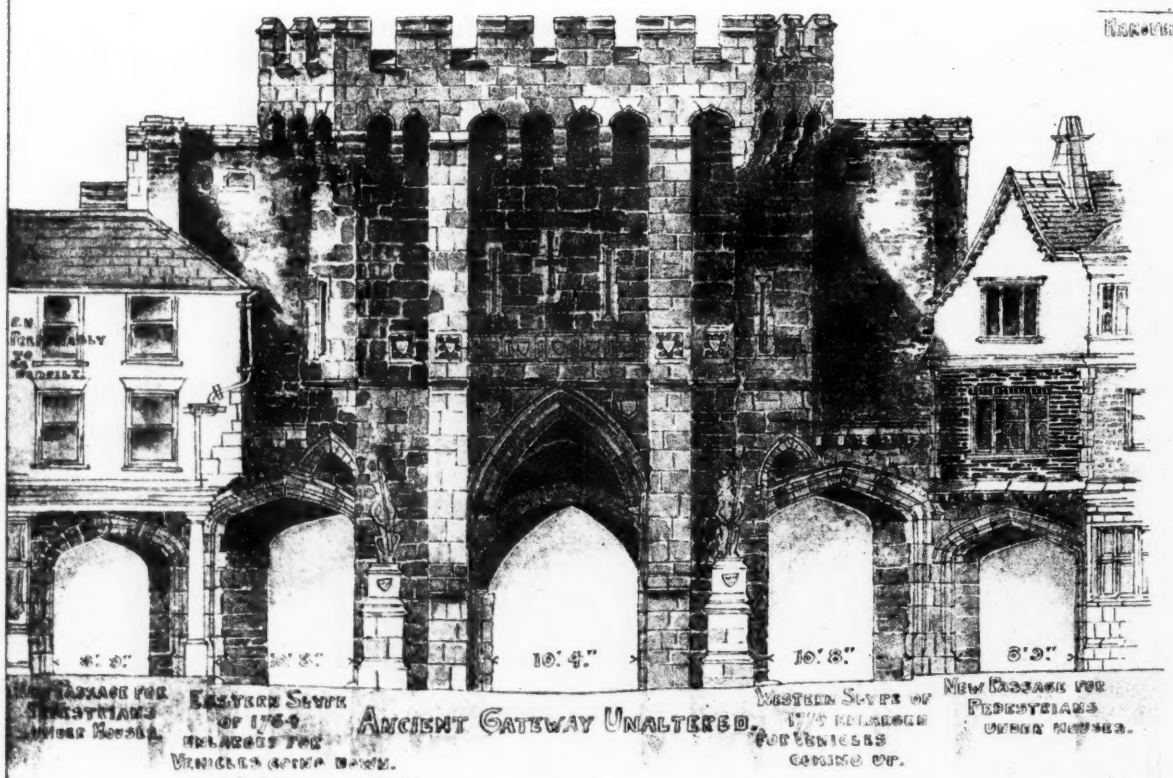
SLYPE MADE IN 1774.

NORTH ELEVATION AS NOW.



PLAN.

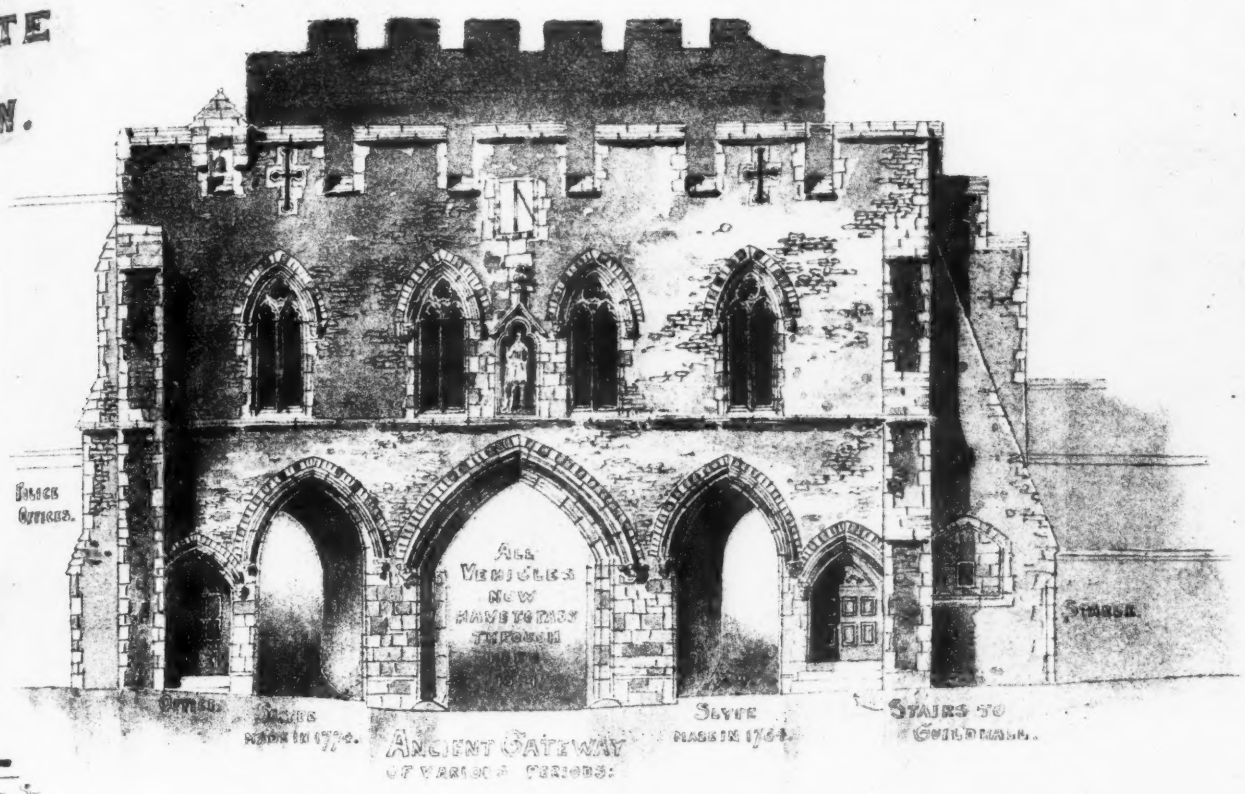
A SCHEME FOR WIDENING THE MAIN STREET, WHILE


9'. 9".
10'. 8".
10'. 4".
10'. 8".
8'. 9".
NEW PASSAGE FOR PEDESTRIANS UNDER HOUSES.
EASTERN SLYPE OF 1764. ENLARGED FOR VEHICLES GOING DOWN.
ANCIENT GATEWAY UNALTERED.
WESTERN SLYPE OF 1774 ENLARGED FOR VEHICLES COMING UP.
NEW PASSAGE FOR PEDESTRIANS UNDER HOUSES.

NORTH ELEVATION AS PROPOSED.

GATE

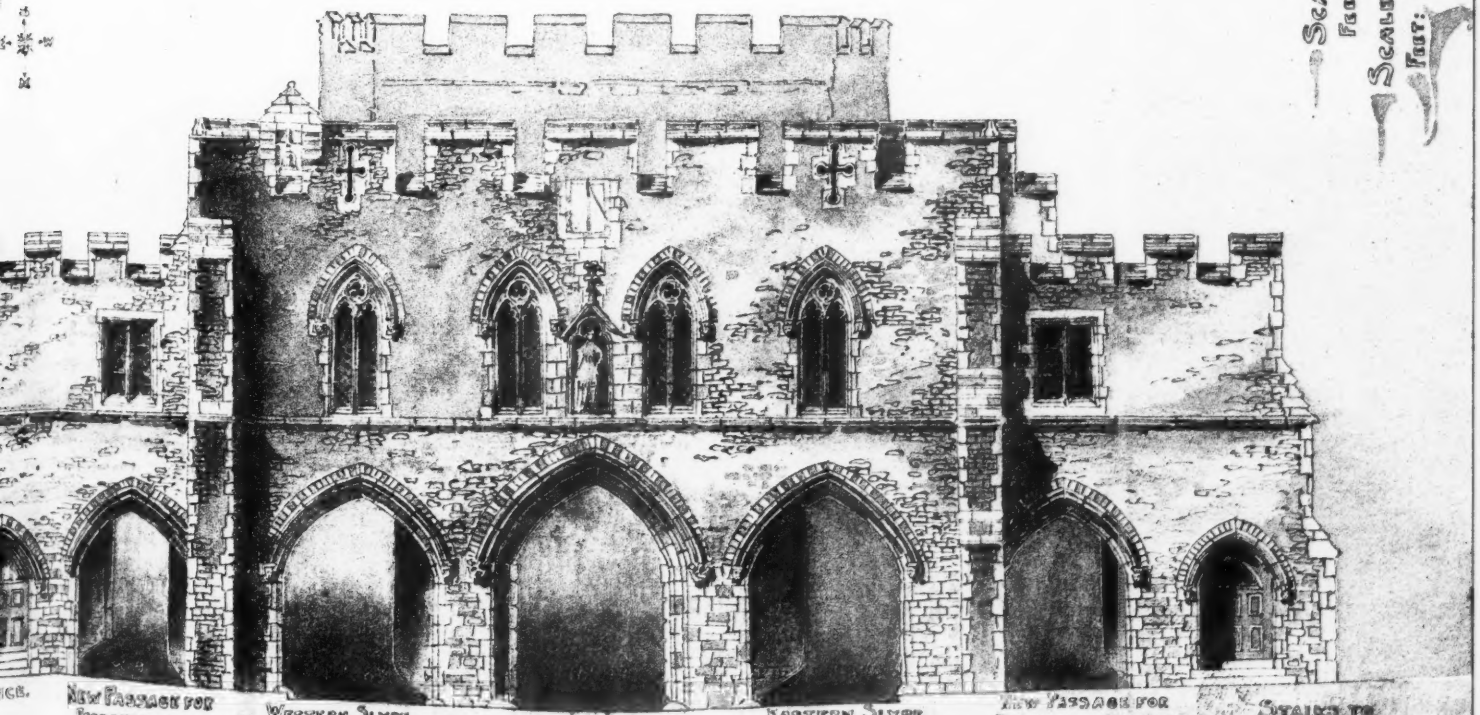
'TON.


Police Offices.
All Vehicles now have to pass through this Archway
Offices
Sloyd made in 1764
Ancient Gateway of various periods:
Sloyd made in 1764
Stairs to Guildhall.

South Elevation as now.

Preserving the Bar-Gate Permanently as a Gateway.

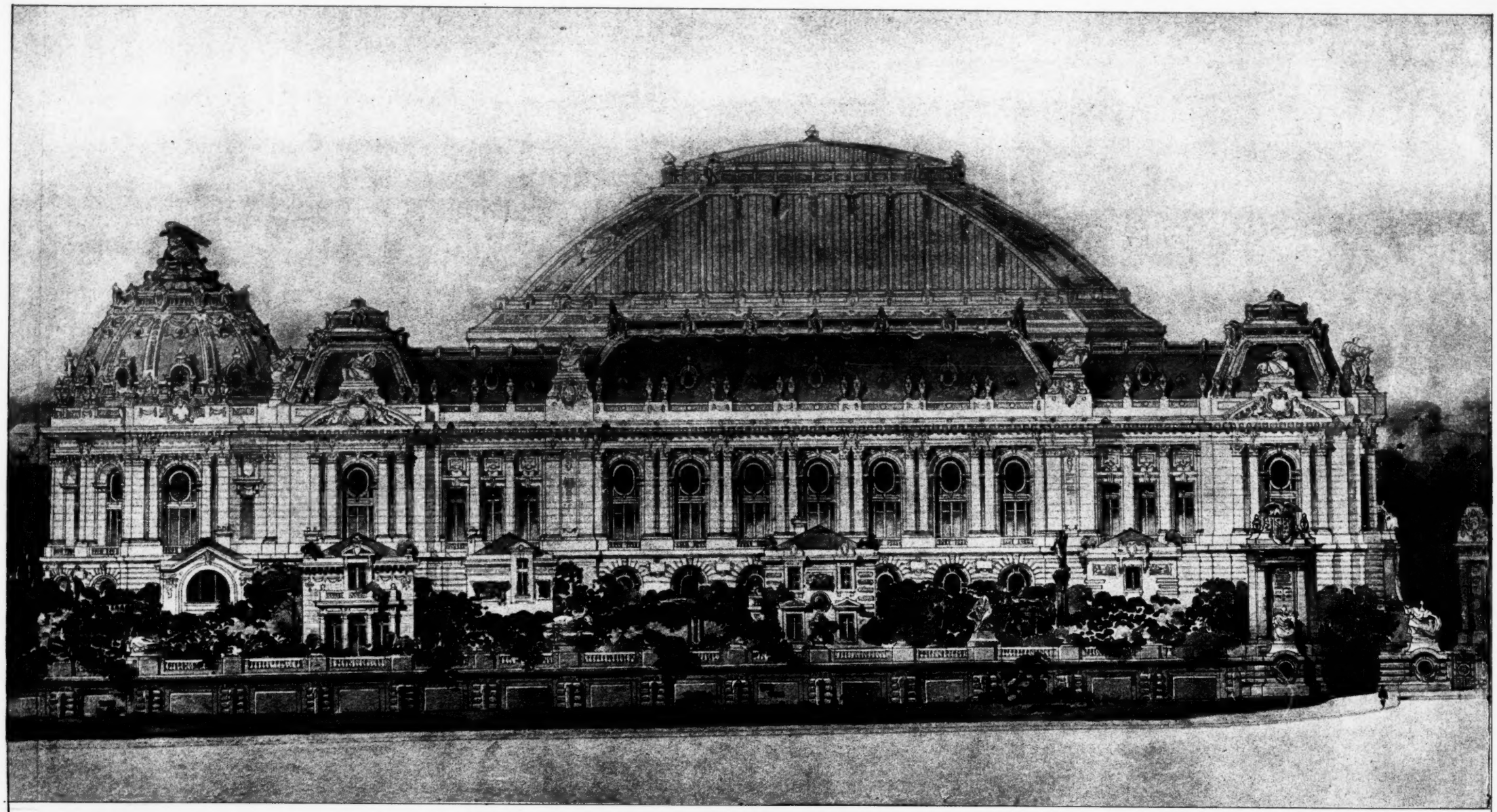
Arch.ts Messrs Lucas
Court st &c &c.


New Passage for Pedestrians under Houses.
Western Sloyd enlarged for Vehicles going up.
Ancient Gate Unaltered.
Eastern Sloyd enlarged for Vehicles coming down.
New Passage for Pedestrians under Houses.
Stairs to Guildhall.

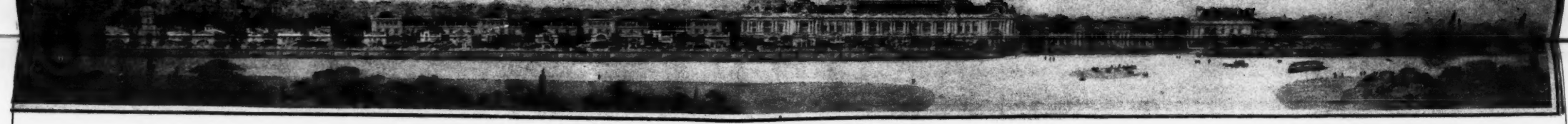
South Elevation as proposed.

Scale for the Plan:
Feet:
Scale for the Elevations:
Feet:

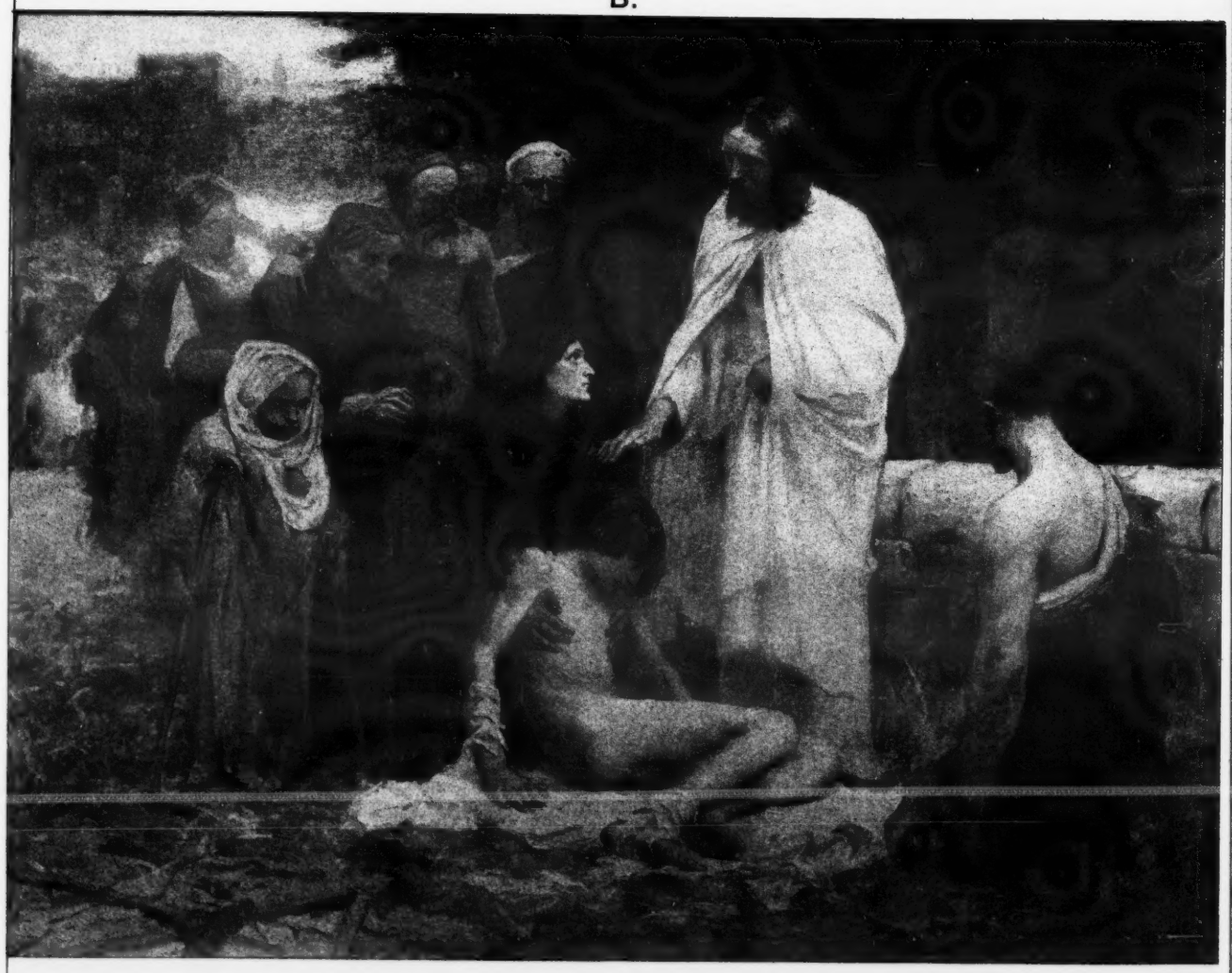
INK-PHOTO. SPRAGUE & Co LTD 4 & 5. EAST HARDING STREET. FETTER LANE. E.C.

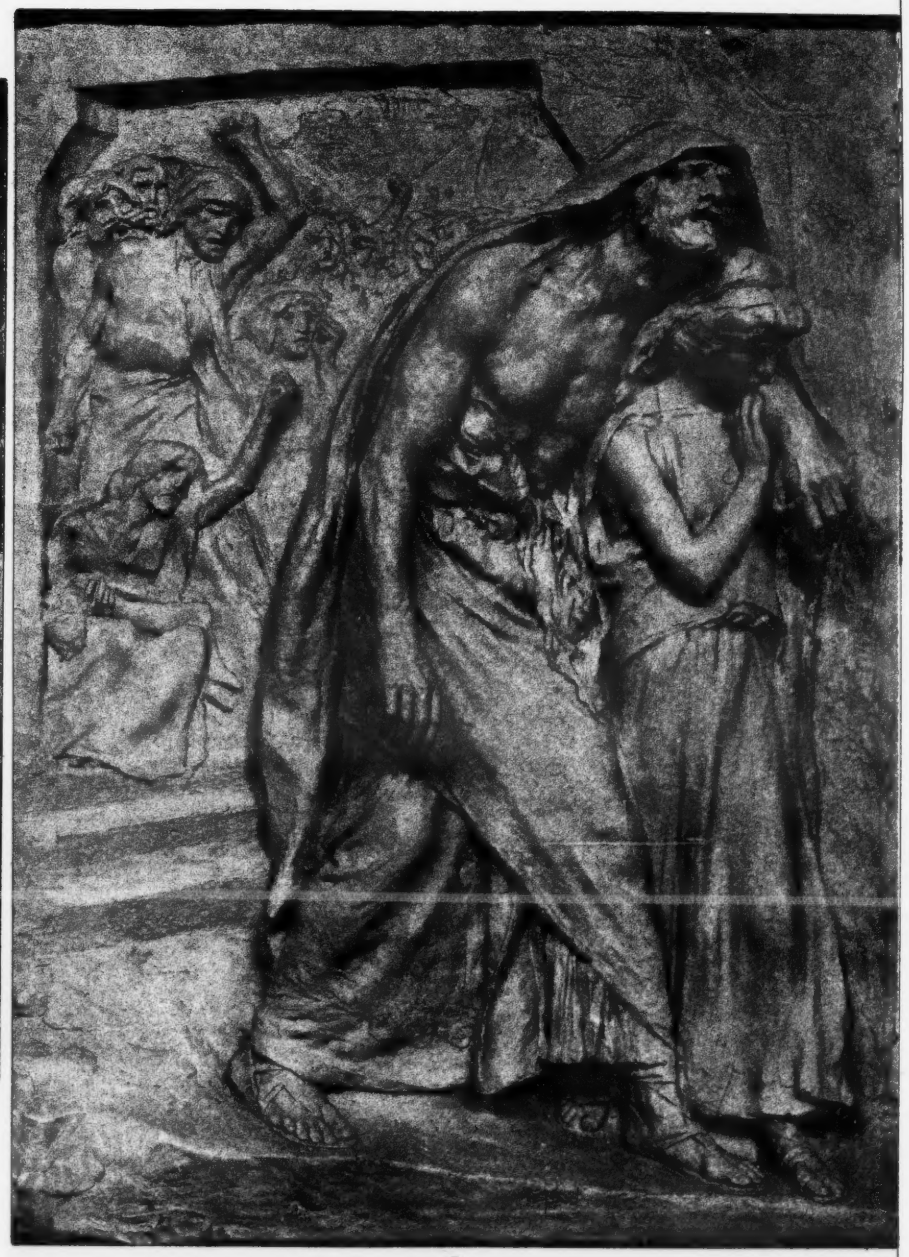


A.



B.





C.

A. Prize Design in Architecture: by M. Jean Hulot.
B. Prize Design in Painting: by M. Jacquet de France.
C. Prize Design in Sculpture: by M. Bouchard.

INK-PHOTO, SPRAGUE & Co LTD 4 & 5, EAST HARDING STREET, FETTER LANE, E.C.

"PRIX DE ROME" DESIGNS IN ARCHITECTURE, PAINTING, AND SCULPTURE.

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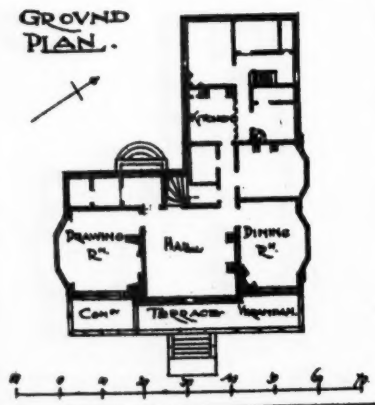
GROUND PLAN.
DRAWING R.M.
HALL
DINING R.M.
CONS.
TERRACE
VERANDAH

NEW HOUSE AT
ASCOT HEATH FOR
H. GONNE. ESQ.
LEONARD STOKES
ARCHITECT.
WESTMINSTER.

PHOTO-LITHO. SPRAGUE & Co LTD 4 & 5. EAST HARDING STREET, FETTER LANE, E.C.